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Managing the Nation's Public Lands

A Program Report Prepared Pursuant to Requirements of the Federal Land Policy and Management Act of 1976

January 31, 1980

Bureau of Land Management U.S. Department of the Interior

D-200

IN REPLY REFER TO:

United States Department of the Interior

1284/1725 (630)

BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

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October 31, 1980

Organic Act Directive No. 81- 1

To: All Assistant Directors and Deputy Directors

From: Director

Subject: Second Annual Public Lands Program Report FD 11/14/80

Section 311 of the Federal Land Policy and Management Act of 1976 (FLPMA) requires us to submit an annual report on our programs to Congress by January 31 of each year. This year, the Office of Program Evaluation has been assigned the responsibility for producing this report. Complying with the imminent deadline will require our strong mutual efforts.

The first annual report, Managing the Nation's Public Lands (January 31, 1980) described the status of our major programs. It focused on FY 1979 activities and reviewed developments since 1976 when FLPMA was enacted. The second annual report will describe activities which took place in FY 1980.

The format used in the first report was worked out with various BLM staffs and in consultation with Congressional staffs. Some reviewers of the final document recommended a format that might be more useful to the public, including color photographs, maps, charts, and other graphics. However, the exceedingly short timeframe for submission to Congress, and the costs of printing, preclude exploration of so significant a format change at this time. Perhaps this can be considered later in the year.

The second report will, therefore, essentially be an update of the first report. Under separate cover, we are sending a copy of last year's report. I expect you to review the first year's report and bring it up to date to reflect the status of your programs as of September 30, 1980. I have put together a staff under Bill Pulford to work directly with you. You can expect them to be in touch with you frequently over the next three months.

Your cooperation is extremely important. This is a logistical and production effort of major proportion. I would appreciate your personal attention in assuring your staff's timely and quality input to the report.

To meet the publication deadline, your draft revision should be sent to Director (630) by November 14, 1980. If you have questions or suggestions, please call Bill Pulford, extension 5784.

A draft production schedule and a copy of the Table of Contents are enclosed for your information.

2 Enclosures (to addressees only)
Encl. 1 - Draft Production Schedule
Encl. 2 - Table of Contents

Ed Hastey
Associate Director

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MANAGING THE NATION'S PUBLIC LANDS

A Program Report Prepared Pursuant to
Requirements of the Federal Land Policy
and Management Act of 1976

January 31, 1980

Bureau of Land Management
U.S. Department of the Interior

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INTRODUCTION

The Public Lands, 174 million acres in the 11 western states and over 200 million more in Alaska, are being called upon today to play a central role in the life of the Nation. As America looks for ways to meet its growing energy, food and fiber, timber, water, recreational and other demands, national attention has turned to the resources of the Public Lands owned by all Americans and managed by the Interior Department through the Bureau of Land Management. The attention is long overdue and, not surprisingly, controversy and conflict over the use of these resources have followed.

The reason is clear. We recognize the Public Lands today as a vast storehouse of resources and values that we will depend upon to sustain us in the next century.

Although they are rarely recognized as such, many of the most pressing domestic policy issues the Nation currently faces are, in fact, also BLM issues. The Bureau is centrally involved in many of the high priority problems that occupy the Nation's attention: offshore and onshore oil and gas development, energy facility siting and trans-continental pipelines, coal development, synfuels development, nuclear waste disposal, MX missile deployment, timber production, the availability of water and land for urban development, and the erosion and disappearance of the Nation's open public spaces.

At the same time, few areas of the country are so vast, so rich, and so poorly understood as the Public Lands. Few Americans understand that they own all this land, or know where it is, what it's worth, who's in charge, or why it's managed the way it is. Similarly, neither the general public, nor the traditional western clientele, nor even emerging clientele have a clear view of the mission, responsibilities, or programs of the agency that manages this land--the Bureau of Land Management.

The Public Lands, what remains of the Nation's original 1.9 billion acre public domain, were until recently called "the lands nobody wanted." But those days are long over. The competition for the use of these lands is intense and growing and much is at stake:

- Half of the Nation's coal reserves is in the West and 60 percent of that coal is on the Public Lands.

- More than 95 million acres of Public Lands are potential sources of geothermal energy.

- Some 35 percent of the Nation's uranium reserves is found in Public Lands in the Wyoming basin and the Colorado plateau.

- Eighty percent of the Nation's oil shale--the largest known reserves in the Free World--lie under Public Lands in the West.

- The Public Lands (including the OCS) contain roughly 10 percent of the Nation's known oil and gas reserves, and much higher percentages of estimated reserves.

- The Public Lands contain an enormous storehouse of the Nation's non-energy mineral deposits including some of the world's principal sources of berylium, molybdenite, antimony, phosphate, and potash.

- More than 21,000 livestock operators graze about nine million head of domestic livestock on these lands. Four percent of the Nation's beef cattle and 28 percent of its sheep graze on the Public Lands at some point during their lives.

- About 1.2 billion board feet of timber--enough to build 86,000 three-bedroom houses--come from the Public Lands in an average year. The estimated value of Public Land timber is $15 billion.

- Nearly 200 million people visited literally hundreds of unique recreational areas on the Public Lands last year. To date 4 Wild and Scenic Rivers, 6 Scenic or Historic Trails, 11 Primitive Areas, 26 Outstanding Natural Areas, 20 Research Natural Areas, 35 National Natural Landmarks and 29 specially designated Recreation Areas have been designated on public lands managed by BLM--lands which contain our richest and most varied areas of recreational opportunity, areas open to all.

- The Bureau manages the largest cultural resource in the Nation. Ninety areas are already listed in the National Register of Historic Places; 80 more are pending. More than 500 others have been identified as qualified for nomination and that number is increasing 200-500 sites per year as we begin to develop inventories of the vast heritage the Public Lands--in part due to their remoteness--still contain.

- The Public Lands are home to one out of every five of the big game animals in the entire United States, including most of the caribou, brown and grizzly bears and desert bighorn sheep, 50 percent of the moose, 65 percent of the mule deer, and 45 percent of the antelope. In addition, BLM manages 47 million acres of wetlands, 30 million acres of riparian habitat, 669,000 miles of perennial streams, and nearly 5 million surface acres of lakes and reservoirs. These lands contain over 90,000 miles of prime trout and other sport fish streams. In short, no single Federal or State agency manages more wildlife habitat than BLM.

These are our "national resource lands," and <u>because</u> of their richness and diversity they provide a classic formula for conflict. Historically, these lands were used predominantly by western livestock operators and mining interests, with few rules or competing demands. Recently, however, awareness of the importance of these lands for a much wider variety of uses has

increased substantially. Increasing scarcity of basic commodities; a rapid shift of the urbanized demographic center of the Nation to the West and South; greater mobility and leisure time; and a growing appreciation of environmental values have increased pressures for the use of these lands for such competing purposes as energy production, urban growth, recreation, wildlife management, and wilderness preservation--as well as for the traditional uses. These demands have broadened the range of people who feel they have a stake in, and something to say about, how the Public Lands are managed. With these new constituencies have come new definitions of the public interest and new claims on the resources of the Public Lands.

The character of the West has changed too. Indeed, the West itself has become a microcosm of the Nation as a whole. It is increasingly an urban place. Even a decade ago, the Census Bureau found that half of the 12 western states were among the 20 more urbanized states in the Union. Colorado's population is 78.5 percent urban; Arizona is 79.6 percent urban; Nevada 80.9 percent urban; and California 90.9 percent urban. Denver, Salt Lake City, Phoenix, Tucson, Sacramento, and Riverside County are among the fastest growing metropolitan areas of the country. The "Sunbelt" development pattern in the 1970's will, no doubt, make these statistics even more dramatic in the 1980 census.

The needs of the West reflect, in many respects, the needs of the rest of the Nation. And they read like a litany for multiple use: expediting but carefully pacing mineral and energy development; ensuring the health of the livestock industry and communities that depend on it while restoring and increasing rangeland productivity; providing for community growth; protecting water resources and ensuring their availability to permit growth; finding places for recreation activities of many kinds, from hunters and fishermen to wilderness hikers or off-road vehicle users; improving access for a wide variety of users; protecting wildlife habitat for both economic and conservation purposes; preserving agricultural land and the great open public land tradition, and protecting the best of our natural, historical, and cultural heritage.

Congress has recognized the evolution of needs, values, and attitudes. The passage of the Federal Land Policy and Management Act of 1976 mirrored broadening national recognition that the Public Lands are the heritage of all Americans and that decisions about how these lands are used should reflect the broadest possible participation and debate. In doing so, it established that the policy of the Nation was that the Public Lands would be managed under the principles of multiple use and sustained yield and that decisions on the use of these lands would be based on detailed inventories of the resource base, comprehensive plans on alternative levels of use, extraordinary levels of public participation, and a careful balance among competing users.

The evolutionary history that resulted in the passage of FLPMA in 1976 has its roots in the first decades of the century. By 1930 the Federal government had disposed of, or authorized for disposal, over 50 percent of the

1.8 billion acres of the original public domain in grants to States, homesteaders, railroads, veterans, and others. Disposal requests had dropped off considerably, with the most obviously prime land already spoken for. The Hoover Administration suggested in 1930 that the remaining land be turned over to the States, but they declined. The deterioration of the productivity of these lands, underscored by drought and depression, led to the passage of the Taylor Grazing Act in 1934. While the language of the Act was comprehensive, it was based on the continuation of grazing as the principal use of the land.

In a remarkably farsighted speech, during the debate on the Taylor Act, Representative Burton French (R-Idaho) told the House more was at stake:

> "The astounding value of the public domain lies in uses that have been overlooked, for the most part...uses as watersheds and for control of stream flow, uses as deterrents to floods, uses for natural storage for irrigated lands, uses for game and recreation, uses for forage and range, uses as forest areas, and finally uses as gigantic regulators of climatic conditions...the value of these lands is such that the welfare and prosperity of the people of a mighty empire all depend upon the fidelity with which the lands we call the public domain are administered."

The Federal government did assume management authority for the Public Lands through the Taylor Act, but it was some time before French's advice on their multiple use values took hold. Moreover, the addition to the Act of the phrase "pending their final disposal" on the Senate floor substantially clouded the purpose of Federal management and provided a reason to some for the Federal government to limit the investment of public funds to improve the productivity of the lands.

Congress clarified its intent to retain and manage the Public Lands for multiple uses in the Classification and Multiple Use Act of 1964 and, in the same year, created the Public Land Law Review Commission to study the public land management issue and recommend needed management actions.

FLPMA, first introduced a year after the Commission's report was released and modified by three Congresses, was the definitive statement of Federal public land management policy. It took away the comfort some found in the ambiguous earlier laws and it eliminated one consideration for the level of public investment in managing the Public Lands—that they would only be disposed of someday.

The Congress has consistently reinforced the management principles of FLPMA in the years since its passage. Both the Coal Leasing Amendments and the Public Rangelands Improvement Act stress careful planning, balanced multiple use, and broad public participation.

More recently, the President has provided support and guidance to BLM in its role of landlord of the Public Lands. In his August 2, 1979 Environmental Message, the President declared that, as manager of the Public Lands, BLM would:

- Be a good steward of the land, seeking to find the best balance of uses to assure that resources are available to meet the Nation's needs and that environmental values are carefully protected.

- Be a good neighbor, providing full opportunities for those affected by our management decisions to be involved in making them, with a special concern for the people and institutions of the western states that are most directly affected.

- Make cost-effective investments in protecting and enhancing these lands within the constraints of fiscal responsibility.

- Seek to resolve conflicts among competing uses in a spirit of cooperation and trust, and to make--not avoid--tough decisions on the allocation of the valued resources of public lands.

This report, prepared pursuant to Section 311 of FLPMA, describes the current status of the major programs of the Bureau of Land Management. The first such report required by the Act, this document focuses on fiscal 1979 activities, but also describes developments in the preceding two years. Each program chapter has four parts: (1) a brief background discussion, (2) a progress report, (3) a description of current public issues associated with the program, and (4) a budget and performance analysis which includes discussion of past, current, or pending audits or evaluations, as appropriate. An Appendix provides a brief description of the organizational structure of the agency.

BUDGET AND PERFORMANCE ANALYSIS DEFINITIONS

1. Authorization: Amounts included in the four-year authorization, P.L. 95-352 (excluding subsequent pay increases). Amounts were authorized by appropriation, but are shown in this report at lower levels in order to be consistent with the activity/subactivity breakdown herein.

2. Budget Authority: Funds actually appropriated. Includes approved reprogramming actions; excludes proposed supplementals.

3. Program Cost: Funds disbursed and liabilities incurred for goods and services already provided. Includes disbursements and accounts payable; excludes unliquidated obligations and changes in stores accounts.

PLANNING AND INVENTORY MANAGEMENT

PLANNING AND INVENTORY MANAGEMENT

FLPMA gave BLM specific authority to prepare and maintain a comprehensive inventory and plans for public lands, thereby strengthening a function that underlies all of BLM's functional programs. The objective of this mandate is to provide plans which guide management of public land resources. These plans assess the suitability of a specific area to sustain multiple uses and analyze the social, economic, and environmental effects of alternative uses and levels of use. Throughout the planning process, BLM seeks broad public involvement--through its advisory boards, through individual contacts with affected individuals and organizations, and in some cases through special cooperative projects.

BLM actually began developing land management plans in the 1960's with multiple use and public participation as basic principles. With the passage of FLPMA, planning intensified, as did the inventory work upon which plans are based. Major effort in resource inventory currently focuses on wilderness, soil and vegetation data for rangeland management, timber, cultural resources, and wildlife habitat. To date, some 80 percent of the public land in 11 States is covered by "management framework plans." Currently 94 plans or plan revisions are underway and in various stages of completion.

Progress Report

New resource planning regulations, developed pursuant to FLPMA, became effective on September 6, 1979, following a 2-year development process. The regulations were closely coordinated with the Forest Service resource planning procedures in order to provide as many common features and terms as possible. They were also developed with a high degree of public involvement, as indicated by the following chronology:

- notice of pre-proposed regulations was published for public discussion in the Federal Register on February 23, 1978, and public comment was accepted through June 1978;

- proposed regulations, reflecting public comments, were published in the Federal Register on December 15, 1978, and received nearly 4 months of public review; and

- final rules were published in the Federal Register on August 7, 1979, and became effective on September 6, 1979.

The new planning process is the core of BLM's resource management decisionmaking. It provides for interdisciplinary resource planning of public lands and their resources. Nine major steps, which are detailed in the September 6, 1979, regulations, are involved in the process:

- Identification of Issues: Issues are identified with the help of the public, other Federal agencies, State and local governments, and Indian tribes.

- Development of Planning Criteria: Standards are set for collecting data, establishing alternatives to be examined, developing criteria for evaluating alternatives, and selecting a preferred alternative. The planning criteria are published for public comment before becoming part of the plan.

- Inventory Data Collection: Resource, environmental, social, economic, or institutional data needed to prepare the plan are assembled.

- Management Situation Analysis: The capability of the public lands to respond to identified needs and issues is determined.

- Resource Management Alternatives: Alternative choices ranging from resource protection to resource production and including continuing an activity at the current level are established. The alternatives must be responsive to the issues identified in the first step and planning criteria.

- Effects of Alternatives: The physical, biological, economic, and social impacts of each alternative are analyzed. The environmental impacts of each alternative are analyzed in accordance with Council on Environmental Quality regulations for the National Environmental Policy Act.

- Selection of Preferred Alternative: A preferred alternative is identified from the range of alternatives considered. An integrated draft plan and Environmental Impact Statement (EIS)--prepared by a District Manager and approved by the appropriate State Director--are then published for a 90-day comment period.

- Resource Management Plan (RMP): The District Manager selects the RMP after evaluating comments on the draft. The District Manager's decision is subject to protest by the State Director before plan approval is final.

- Monitoring and Evaluation: Monitoring and evaluation are accomplished at prescribed intervals and with specified standards, based on the sensitivity of the resources and related decisions.

RMP's prepared through this process form the basis for decisions on the protection and management of critical areas and the allocation of resources between uses or levels of use, including:

- which wilderness study areas should be recommended as suitable or unsuitable for the National Wilderness Preservation System;
- which areas qualify for special attention as Areas of Critical Environmental Concern;
- which lands are suitable for coal leasing and development and which are not;
- how vegetation will be allocated for wildlife, wild horses, and domestic livestock use while protecting the soil and vegetative cover;
- which areas will be open to outdoor recreation vehicle use;
- which lands are suitable for timber production;
- and many others.

Although the new regulations are now final, full implementation will be phased over the next 4 years to account for the different stages of plans already underway under the old procedure. Accordingly, on December 3, 1979, a notice was published in the Federal Register indicating those portions of the new regulations that will apply to ongoing studies. All plans begun in fiscal year 1981 and thereafter will be developed under the new regulations. Five of the plans which begin in fiscal 1980 will serve as pilot projects to develop and test planning procedures to implement the new regulations.

Current Issues

The new planning regulations require that BLM be consistent with the offically approved plans of State and local governments, among others, insofar as that would be consistent with Federal law and the purpose of FLPMA. They also provide for consistency with State and local policies and programs, unless they clash substantively with those of the Secretary of the Interior.

These are important new provisions. They provide a new level of commitment on BLM's part to cooperate with local governments, but they place a burden on State and local governments as well. Who will be the State focal point? How will differences among communities or between community plans and State plans be resolved? By what criteria will consistency determinations be made?

A major concern for BLM during 1980 will be the successful completion of the California Desert Conservation Area (CDCA) land-use plan, which was authorized by FLPMA. New planning concepts are being pioneered for this plan, and BLM views it and the associated EIS as a valuable learning experience that will be reflected in future resource management planning.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Deputy Director for Lands and Resources
2. Field Administrators: State Directors and Director, Eastern States Office

B. Authorizing Legislation

Federal Land Policy and Management Act of 1976, P.L. 94-579, 43 U.S.C. 1711, 1731, 1732, 1781; Bureau of Land Management Appropriation Authorization of 1978, P.L. 95-352, 43 U.S.C. 1748; Federal Coal Leasing Amendments of 1975, P.L. 94-377; Naval Petrolum Reserve Production Act of 1976, P.L. 94-258, 43 U.S.C. 6501

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	12,800	10,900
2. Budget Authority ($000's)	12,776	11,044	12,340

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Planning and Data Management
3. Subactivity: Multiple Use Planning

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	12,872	11,044	12,272	12,340
2. Work Years	391	417	435	435

F. Performance

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
Work Units				
1. Unit Resource Analyses (number)	38	58	35	45
2. Management Framework Plans (number)	20	44	67	26
3. Planning Area Analyses (number)	23	27	26	16

G. Evaluations (Completed, Underway, Planned)

None

ENERGY AND MINERALS

OIL AND GAS LEASING

Under the terms of the Mineral Leasing Act of 1920 and the Mineral Leasing Act for Acquired Lands of 1947, BLM is responsible for oil and gas leasing on about 520 million acres of public lands and national forests, acquired land, and private land where mineral rights have been retained by the Federal government.

The U.S. Geological Survey (USGS) estimates that the Nation's oil reserves amount to about 35 billion barrels, of which about 90 percent are onshore and 4.5 percent are on Federal lands. Total remaining recoverable gas reserves are estimated at 208 trillion cubic feet, of which 83 percent are onshore and 6.1 percent are on Federal lands.

The Mineral Leasing Act provides for both competitive and noncompetitive oil and gas leasing. Lessees are limited to a total of 246,080 acres in any State, except Alaska. In fiscal year 1979, 11,356 leases were issued for slightly less than 13.0 million acres of which 71,422 acres were leased competitively. Production on Federal lands in fiscal year 1979 was 443.1 million barrels of oil and 5.6 trillion cubic feet of gas.

Competitive leases, based on bonus bids, are issued on lands that the U.S. Geological Survey designates as within a Known Geologic Structure (KGS). Such leases cover a maximum of 640 acres and have a primary term of 5 years. If production is established, they may be extended. The annual rental is $2 per acre and a royalty of from 12-1/2 to 25 percent is charged for producing wells.

Noncompetitive leases are issued on lands outside a KGS to the first qualified applicant. Such leases cover a maximum of 2,560 acres and are renewable annually at $1 per acre for a total of 10 years unless production is established. A royalty of 12-1/2 percent is charged on producing wells. Roughly 97 percent of the lands offered for leasing is outside a KGS and is therefore leased noncompetitively. The leading States in current oil and gas activity are Colorado, Montana, New Mexico, Utah, and Wyoming.

Noncompetitive leases on lands that have not been previously leased are granted "over-the-counter." Noncompetitive leases that have been surrendered by a lessee are reoffered in the month following their release through the simultaneous oil and gas leasing system. Through this system, one application is drawn from all the applications filed for the available block. The filing fee is $10 per application.

Onshore oil and gas leasing and development are closely coordinated between BLM and USGS. Generally, BLM issues leases and integrates the

leasing use with other land uses. USGS designates lands that are within a KGS and supervises the drilling and production phases, including collection of royalties.

Progress Report

On August 7, 1979, the Secretary of the Interior sent to Congress the Administration's bill to reform the current system to eliminate the opportunity of fraud and expand competitive oil and gas leasing. Introduced by Senator Henry M. Jackson as S. 1637, the bill would reduce speculation, provide a fair monetary return to the public, and encourage diligent, orderly, and environmentally sound development. One hearing had been held at yearend.

In addition, BLM took direct action to revise the simultaneous oil and gas leasing system on September 28, 1979, with the publication of new proposed rules for oil and gas leasing in the Federal Register (43 CFR 3100). The proposed rules are designed to limit the influence and abuse of filing services, tighten diligent development requirements, and improve BLM management practices. Provisions being considered include: holding simultaneous drawings quarterly rather than monthly (to allow for assembling more attractive drilling blocks); extending the time for filing applications; prohibiting prior agreements to assign leases; requiring personal signatures on critical documents; increasing the maximum size of individual leases; and increasing rentals to discourage speculative holdings.

Current Issues

There are a number of long-standing problems with the current leasing system. Low rentals--the inducement used in the Mineral Leasing Act to promote explorations--today have the effect of impeding full-scale exploration by encouraging speculators to tie up acreage at low cost. The leasing system also fails to reflect the increasing value of scarce oil and gas resources by emphasizing noncompetitive leasing at fixed fees generally well below fair market value.

In addition, because Federal oil and gas leases are assignable, selling them has become a small but active business. Some brokers lease acreage based on specific geological information and sell the leases to oil companies or organize drilling deals themselves.

Other brokers try to anticipate the potential of a leased area and hold acreage that could be much in demand if a discovery were made nearby. Still others--often exaggerating the oil and gas potential of the land--sell their leases to the general public in assignments as small as 40 acres.

Brokers have further extended the retailing of leases by representing individuals in the simultaneous drawings. Brokers advertise and promote the leasing system and charge individuals fees in excess of the $10 filing fee they would pay if they filed directly with BLM. Although this practice is legal, it often greatly exaggerates the prospects of success for those citizens who participate. Moreover, it produces a massive workload--an average of 400 applications for each lease issued.

While the $10 filing fee more than pays for the paperwork involved, BLM personnel who should be assigned to more productive work are tied up in handling thousands of unsuccessful applications. The weaknesses in those leasing procedures produce as many as 500 charges of fraud or irregularity a year.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Energy and Minerals Resources

2. Field Administrators: State Directors, especially Wyoming, Colorado, Utah, and New Mexico

B. Authorizing Legislation

Federal Land Policy and Management Act, P.L. 94-579, 43 U.S.C. 1701 et seq.; Mineral Leasing Act, P.L. 66-146, 30 U.S.C. 226 et seq; Mineral Leasing Act for Acquired Lands, P.L. 80-382, 30 U.S.C. 351 et seq.; Bureau of Land Management Appropriation Authorization of 1978, P.L. 95-352, 43 U.S.C. 1748

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	9,600	11,100
2. Budget Authority ($000's)	8,039	10,169	8,810

D. Appropriation Structure:

1. Title: Management of Lands and Resources
2. Activity: Energy and Minerals Management
3. Subactivity: Energy Onshore
4. Component: Oil and Gas

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	7,996	10,169	7,474	8,820
2. Work Years	351	370	386	446

F. Performance

Work Units	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Leases issued	11,100	12,000	11,356	12,000
2. Development plans reviewed	2,000	3,450	3,500	3,600
3. Compliance checks conducted	6,900	7,900	11,200	11,300
4. Simultaneous filings processed (million)	2.3	4.0	3.9	4.5
5. Assignments processed	38,000	36,600	28,400	31,200

G. Evaluations (Completed)

1. Organization: General Accounting Office
2. Title and Date: Simultaneous Filings, April 13, 1979
3. Major Findings: While GAO found some procedures which might make it possible, it reported no fraudulent manipulations of the simultaneous drawings.
4. Subsequent Actions: Pending general revision are discussed above, nothing specific was done to follow up on the report

H. Evaluations (Underway and Planned)

None

ENERGY ON THE OUTER CONTINENTAL SHELF

The Outer Continental Shelf Lands Act of 1953 established Federal jurisdiction over approximately 1.147 billion acres of submerged lands on the continental shelf seaward of State boundaries. The Act charged the Secretary of the Interior with responsibility for the administration of mineral exploration and development on the Outer Continental Shelf (OCS). It also empowered the Secretary to formulate regulations so that provisions of the Act might be met. To carry out this mandate, the Secretary designated the Geological Survey as the agency responsible for overseeing exploration and development operations on the Outer Continental Shelf and the Bureau of Land Management as the administrative agency responsible for supervising leasing. In this role, BLM is directed to provide for orderly development of OCS oil and gas resources, and to provide for protection of the environment concomitant with development of mineral resources.

Since 1953, over 16,000 wells have been drilled on more than 3,500 leases. Nearly 5 billion barrels of oil and 39 trillion cubic feet of gas have been produced yielding more than $28 billion in revenues to the Treasury. The OCS is expected to remain a vital source of oil and gas in the near future. While known reserves total about 3.4 billion barrels of oil and 36 trillion cubic feet of natural gas, estimates of potential additional reserves run as high as 50 billion barrels of oil and 180 trillion cubic feet of gas.

During the past 25 years, the percentage of total U.S. production of oil and natural gas which originates in the Outer Continental Shelf has increased from less than 1 percent to more than 9 percent for oil and 22 percent for gas. Through 1975, OCS leasing activity was confined almost entirely to the Gulf of Mexico and a small area in the Santa Barbara channel off Southern California. Recognizing that the growing national demand for oil and gas warranted increased OCS development, the Department of the Interior issued a planning schedule in November 1974, which began the leasing of "frontier" areas off the Alaska, California, and Atlantic coasts.

The Congress enacted the Outer Continental Shelf Lands Act Amendments in 1978. These amendments are the first revisions to the procedures used for leasing offshore oil and gas since the original OCS Lands Act was adopted 25 years earlier. Included in the reforms are measures to ensure that leasing of offshore resources proceeds on a predetermined five-year schedule which is paced with the development of resource and environmental information needed for safe and responsible development of the Nation's offshore resources. A number of provisions in the new procedures are noteworthy.

- Coastal States and local communities are given a role in the decision process for the leasing of Federal OCS lands.

- Technical, environmental, and economic information is made available to State and local governments and the public in advance of leasing and development.

- Flexible bidding procedures enable the Secretary of the Interior to obtain a more reasonable return for the sale of the resources from OCS lands.

- Responsibilities are placed on the Secretary of the Interior to protect the fisheries, marine biota, and coastal resources in a balance with the development of offshore oil and gas.

- Authority is provided to the Department of the Interior to ensure that lessees abide by the restrictions and conditions of their leases which are designed to protect the environment and human health and safety, including cancellation of the lease where there is likelihood of serious environmental harm.

- Liability for oil spills is established and compensation for damages is required.

- Plans for exploration and development must be submitted and approved before a leasee can exercise its rights under a lease.

- An environmental studies program is aimed at developing environmental and socioeconomic information which is geared to the five-year leasing schedule.

The Department of the Interior has defined three major goals to guide the management of the Nation's submerged mineral resources:

(1) The orderly development of marine mineral resources to meet the energy demands of the Nation

(2) The protection of the marine and coastal environment

(3) The receipt of a fair return for leased mineral resources.

The OCS leasing process and the new five-year leasing schedule, the Intergovernmental Planning Program, and the Environmental Studies Program (discussed later) are the key areas of BLM involvement in the Department's OCS program.

The OCS Office assembles environmental profiles and data on an area, including information from resource reports requested of other Federal agencies prior to issuance of the Call for Nominations. Geologic, geohazard, and resource information is also assembled at this time by the appropriate regional office of the Geological Survey's Conservation Division.

The first step in which the public is requested to supply information in the leasing decision process is the Call for Nominations, usually between 26 and 34 months prior to a proposed sale date. The Call for Nominations solicits industry interest in specific tracts as well as comments from the States, other Federal agencies, and the public regarding tracts that should or should not be considered for leasing. Comments and nominations are analyzed by the Bureau of Land Management OCS Field Office responsible for processing lease sales in its area. These offices are located in Anchorage, New Orleans, Los Angeles, and New York.

The BLM OCS Office and the Geological Survey's appropriate regional office, after consultation with affected States, make a preliminary joint tract recommendation to their headquarters offices. After further consideration, including coordination with Geological Survey and other Federal agencies with jurisdiction in the OCS, BLM forwards recommendations to the Secretary for a tentative selection of tracts to be subject to further analysis. This usually occurs 22 to 27 months prior to the proposed scheduled sale date.

The Bureau of Land Management prepares an Environmental Statement assessing the tentatively selected tracts and any alternatives developed through the scoping process or resulting from the environmental analysis itself. During this environmental assessment process, special stipulations may be proposed to be attached to leases resulting from the sale in order to mitigate potential environmental impacts of multiple-use conflicts. The preparation of an Environmental Statement normally takes 15 to 20 months.

Following the publication of an Environmental Statement, a Secretarial Issue Document (SID) is prepared and submitted to the Secretary for use in making a preliminary decision. This document outlines environmental issues and impacts addressed in the Environmental Statement, and economic and other considerations. The SID and the final Environmental Statement provide the information necessary to enable the Secretary to make a decision whether or not to hold a lease sale.

If the Secretary's preliminary decision is to proceed with the sale proposal, a Proposed Notice of Sale is issued, indicating the tracts proposed for leasing. Governors of affected States are allowed up to 60 days to comment on the proposed lease sale. The Secretary is required to consider the Governor's comments regarding the size, timing, and location of the proposed lease sale, and he must indicate in writing his reasons for accepting or rejecting their recommendations. At least 30 days prior to the scheduled sale, a final Notice of Sale is published in the Federal Register. The entire prelease sale process normally requires 26 to 34 months.

Progress Report

Section 18 of the OCS Lands Act Amendments of 1978 required the Secretary to submit to Congress a five-year schedule of leases determined to meet best the Nation's energy needs. The new proposed five-year schedule includes 30 sales between March 1980 and February 1985--six in the Atlantic, eleven in the Gulf of Mexico, four in the Pacific, and nine in Alaska. The final Environmental Impact Statement on the proposed five-year schedule was published January 18, 1980, and final schedule submission is expected in March 1980.

Implementation of the new schedule emphasizes cooperation with coastal States and communities to protect coastal resources and resolve possible conflicts. Efforts to coordinate with coastal State governments have increased substantially in the last few years. The Department has worked with advisory groups to the OCS program since 1974. A reorganization of the OCS Advisory Board in December 1978 expanded the Board and its functions, at the same time making it more responsive to specific program needs.

The Advisory Board is now comprised of the members of eight committees. Representatives of Federal agencies, coastal State governments, and the private sector form the Policy Committee to provide the Secretary with policy guidance on all aspects of OCS exploration and development. The Scientific Committee monitors BLM's Environmental Studies Program, providing advice on the feasibility, appropriateness, and scientific value of its research. The Committee's 15 members are respected scientists from all six OCS regions with a balance of perspectives and technical skills.

Six Regional Technical Working Group Committees--one for each leasing region--bring together representatives of Federal agencies, State governments, and the private sector who are concerned with and knowledgeable about technical matters relating to OCS development. They work closely with BLM to provide recommendations corresponding to the requirements of the five-year lease schedule, on such matters as tract inclusion or exclusion from proposed lease sales, regional and site-specific study needs, the designation of acceptable transportation corridors, the review of Environmental Statements, issues for discussion in Secretarial Issues Documents, and the development of lease stipulations. In the event of a marketable find, each Regional Group will develop a Regional Transportation Management Plan for its area.

The Regional Technical Working Groups carry out BLM's Intergovernmental Planning Program for OCS Oil and Gas Leasing, Transportation, and Related Facilities (IPP). Just underway, the IPP should provide an extraordinary new level of participation in the OCS development process, one based on the anticipation of problems and on their resolution through consensus and planning rather than confrontation. Throughout the leasing process, BLM cooperates with a Regional Technical Working Group Committee within the appropriate leasing area.

The Environmental Studies Program is a major part of BLM's OCS leasing program. Started in 1974 in response to a challenge to the adequacy of the environmental data base related to a scheduled sale in the Eastern Gulf of Mexico, the program was designed to produce and analyze information needed for prediction, assessment, and management of the potential impacts of OCS development on the human, marine, and near-shore environments. This information is important to the production of Environmental Statements and other decisionmaking documents used for tract selection, operating plan evaluations, and future sale decisions.

During the past two years, the program has been revised to strengthen its link with the leasing process. Since 1977, when a study by the National Academy of Science sponsored and funded by BLM found that the program was not providing the kind of scientific information required to assist the early stages of the leasing/decisionmaking process, the Environmental Studies Program has undergone major revision.

Under the new program, Regional Studies Plans are developed annually by OCS Field Offices. Working with the Regional Technical Working Groups, established under the OCS Advisory Board to work with the IPP, the field offices identify environmental and socio-economic issues associated with OCS program decisions and translate them into study needs. Each Regional Studies Plan is compiled into a National Plan and screened to rank studies in priority. Criteria include criticalness of information—i.e., necessity for responding to statutory or legislative requirements, immediacy of information need, breadth of applicability, degree of regional concern—and others. Additional oversight is provided by the Scientific Committee of the OCS Advisory Board. The result is a program of studies designed to parallel the leasing process, anticipate scientific issues, and provide guidance for leasing decisions.

In fiscal year 1979, the Bureau funded more than 134 studies addressed to all areas of the U.S. Outer Continental Shelf. Among the subjects investigated were geological hazards to OCS development, marine mammals and birds, air quality modeling, subsea permafrost and oil-ice interactions, effects of oil and sound on marine organisms, and cultural resources.

Current Issues

The crux of all the issues surrounding OCS development is the required balancing of environmental risks and developmental benefits. Recently, this conflict has focused on the proposed five-year leasing schedule. Foremost among the areas of contention is the proper pace of leasing in Alaskan frontier areas. While several oil companies would like to see faster leasing than has been proposed, the State of Alaska, environmental groups, and others would like to see some of the Alaska sales delayed or indefinitely postponed. At issue are: (1) sensitive biological resources and high biological productivity, especially in the southern Bering Sea, and the adequacy of information on these resources to making sale decisions; (2) the status of local coastal zone planning, especially in

areas where little infrastructure or planning capability currently exists; (3) effects of OCS development upon Alaska Natives, including subsistence resources, and (4) ability of technology to operate in harsh environments in Alaska, particularly in Arctic ice conditions.

Two related concerns are the extent to which current refining capacity in California can handle offshore California and Alaskan crude oil, and the effects of this crude influx and of drilling operations off California on regional air quality. The size of California sale areas and the vulnerability of coastal resources to nearshore OCS development are also of concern in California sales.

The proposed schedule is designed to reflect the desires of the President and the Congress to accelerate leasing to increase domestic energy supplies. At the same time, the Secretary is committed to conducting the OCS leasing development program in a manner which is sensitive to and protects against foreseeable environmental risks, and the final Environmental Statement on the schedule analyzes several additional alternatives not covered in the draft Statement. Given adequate information and manpower, augmented OCS production and environmental quality need not be mutually exclusive.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Energy and Minerals Resources

2. Field Administrators: Office Heads, OCS Offices in Anchorage, New York, New Orleans, and Los Angeles

B. Authorizing Legislation

Outer Continental Shelf Lands Act of 1953, P.L. 83-212, 43 U.S.C. 1331-1343; National Environmental Policy Act of 1969, P.L. 91-190, 43 U.S.C. 4321, 4331-4335; Outer Continental Shelf Lands Act of 1978, P.L. 95-372, 43 U.S.C. 1801; Bureau of Land Management Appropriation Authorization of 1978, P.L. 95-352

C. Funding

	1978	1979	1980
1. Authority ($000's)	N/A	62,100	70,000
2. Budget Authority ($000's)	54,259	47,196	59,413*

*Includes FY 1979 Supplemental carried forward.

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Energy and Minerals Management
3. Subactivity: Energy Minerals - Offshore

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	45,394	47,196	46,138	59,413
2. Work Years	364	395	317	335

F. Performance

Work Units

1. Studies	79	92	92	86
2. Environmental Statements	5	4	4	4
3. Lease Sales	3	5	5	4

G. Evaluations (Completed)

1. Organization: U.S. General Accounting Office
2. Title and Date: Georgia Embayment - Illustrating Again the Need for More Data Before Selecting and Leasing Outer Continental Shelf Lands, March 19, 1979
3. Major Findings: GAO review indicates that the data available to select and value tracts was limited. The degree of industry interest was significantly less than in prior sales due to the fact that the area was believed to have limited geological potential. This sale might not have been held at this time had more information been available.

   A significant aspect of this sale was the experimental use of a sliding scale royalty bidding system. According to GAO, the new bidding system has potential for helping to assure that the public receives a fair market value return for OCS resources.

4. Subsequent Action: DOI pointed out that GAO does not define "fair market value and that DOI's recent analysis of the criteria used in bid decisions showed that current procedures result in "levels of bid rejections that approximate the optimal from the viewpoint of public receipts."

DOI stated that it will continue to work with the Department of Energy to identify potential benefits to national energy policy from improved information concerning OCS resources.

1. Organization: U.S. General Accounting Office
2. Title and Date: OCS Leasing Program and the Role of Resource Reports, February 1979
3. Major Findings: The report recommended that BLM improve the quality and utility of its OCS Resource Reports.
4. Subsequent Action: BLM is complying with the report's recommendations by:

   - Clearly informing Federal agencies preparing Resource Reports of the role and importance of the Reports, of why the information is needed, and of how it will be used;
   - Tailoring requests for Resource Reports to each individual agency by requesting information specific to its expertise;
   - Providing feedback to cooperating agencies on how the Resource Report information was used in the OCS leasing process.

1. Organization: U.S. General Accounting Office
2. Title and Date: Lower Cook Inlet - Another Example of More Data Needed for Appraising Outer Continental Shelf Oil and Gas Resources, June 8, 1978
3. Major Findings: The Department of the Interior selected and evaluated Outer Continental Shelf oil and gas tracts for leasing without obtaining enough information to determine their potential resources. This encourages industry to tie up capital in lands with minimum or no resource potential or to buy lands for less than fair market value. To prevent this, the leasing program should be designed to offer the best acreage after it has been adequately explored for resources.
4. Subsequent Action: Interior supports GAO's concept of prelease exploration but it rejects GAO's specific recommendations for carrying out such a program. Interior said, "It is particularly important, in our view, that the development of a prelease exploration program be based upon careful study of the issues and the development of criteria."

1. Organization: U.S. General Accounting Office
2. Title and Date: Outer Continental Shelf Sale #35 - Problems Selection and Evaluating Land to Lease, March 7, 1977
3. Major Findings: OCS tracts were selected without obtaining adequate information to determine their potential resources. This, plus pressure to lease a predetermined number of acres resulted in: (1) selecting tracts which the Department believed had little potential for development, (2) deriving unreliable tract values based on inadequate data, and (3) overestimated revenues for budget purposes by 5 times the actual revenues received, because of inadequate information and overly optimistic estimates.
4. Subsequent Action: The Secretary and the Director, Office of Management and Budget expressed concern with the cost of obtaining additional data and believed GAO had not presented the cost effectiveness of a systematic exploration program.

1. Organization: U.S. General Accounting Office
2. Title and Date: Outer Continental Shelf Sale #40 - Inadequate Data Used to Select and Evaluate Lands to Lease, June 28, 1977
3. Major Findings: The Department of Interior's policy of leasing Outer Continental Shelf Lands that have not been properly evaluated (because of insufficient data) encourages industry to speculate in lands believed to contain no or minimal resources and does not guarantee market value for these lease resources.
4. Subsequent Action: Interior official told GAO that the Department's views on the recommendations in the Sale 35 report as stated in the June 13, 1977, letter from Under Secretary of the Interior to Chairman Ribicoff, Senate Committee on Government Operations could be considered representative of their views on GAO's recommendations in this report. (see Subsequent Action, OCS Sale #35.)

1. Organization: Bureau of Land Management, Washington Office
2. Title and Date: New Orleans, New York, Pacific and Alaska OCS Office Evaluation Reports, 1977
3. Major Findings: Reports studied the managerial effectiveness of the Offices to provide input to an overall assessment of the OCS program. Issues identified which relate to the program as a whole were:

- Employees feel that EIS quality standards are often changed by the Department on short notice causing frustration and disillusionment.

- There are strong indications that the Environmental Studies Program is mostly oriented to baseline studies while slighting current management information needs.

- Multiple-Use Management: There are resources on the OCS other than minerals (e.g. cultural resources) which are being stolen or otherwise destroyed in the absence of management by any agency.

- The standardization of organization structure and role definition for OCS offices are concerns, as are a Public Affairs Plan for the OCS program and Geological Survey/BLM coordination.

4. Subsequent Action: Standard organizational structures were established for all OCS offices, and the Washington office OCS structure has been completely reorganized. Liaision with Public Affairs and Geological Survey has been intensified, and the Environmental Studies program has been completely revised.

1. Organization: Appropriations Committee Investigative Study on the OCS Environmental Studies Program
2. Title and Date: A Report to the Committee on Appropriations U.S. House of Representatives on the Outer Continental Shelf Environmental Studies Program, March 1979.
3. Major Findings: The Report notes the extensive evaluation of the studies program that has been carried out by BLM during the last year and concludes that the revised program will improve BLM's OCS activities.
4. Subsequent Action: As stated in the Secretary's May 7, 1979 letter to Chairman Yates, House Subcommittee on Interior and Related Agencies: "Having accomplished this first effort to revise the studies program we do not intend to have it remain static. We will, instead, continue to review the program in light of changing needs and conditions."

1. Organization: National Academy of Sciences
2. Title and Date: OCS Oil and Gas: An Assessment of the Department of the Interior Environmental Studies Program, December 1977
3. Major Findings: NAS found that "the Program has not been based on an adequate assessment and identification of the scientific research that is required to answer environmental concerns for oil and gas operations," and that the program does not contribute effectively to leasing decisions or to the collection of good scientific information necessary for OCS management, both offshore and onshore.

4. Subsequent Action: The findings and recommendations of the evaluation formed the basis for the publication of Study Design for Resource Management Decisions: OCS Oil and Gas Development and the Environment, October 1, 1978, U.S. Department of the Interior, Bureau of Land Management--a revision of the program design for the OCS Environmental Studies Program.

H. Evaluations (Underway and Planned)

Reevaluations of the OCS program is an ongoing process. Formal evaluations will be done beginning in early FY 1981.

COAL LEASING

The Federal government owns an estimated 60 percent of the coal resources in Colorado, Montana, New Mexico, North Dakota, Utah, and Wyoming. At the close of fiscal year 1979, 546 leases covered a total of 799,250 acres containing an estimated 17.3 billion tons of coal.

President Carter established an objective for the coal program in May 1977 when he instructed the Secretary of the Interior to increase production in areas where mining would be environmentally acceptable and compatible with other land uses. Thus, the basic objective of the Federal coal program is to lease Federal lands for the development of coal in a manner that fully protects the public interest and the rights of surface owners.

In 1971, after completing a year's study of the Federal coal leases, the Department of the Interior halted the issuance of coal leases and prospecting permits (which could lead to a lease if coal were found in commercial quantities) to reassess coal leasing policies. The study showed that the acreage under lease on the public domain was rapidly increasing while production from Federal leases was decreasing. Acreage under lease had increased from about 80,000 acres in 1945 to 778,000 acres in 1970. Production during this period had declined from about 10 million tons per year to 7.4 million tons per year.

In 1977, the Interior Department's effort to renew competitive coal leasing failed when the Natural Resources Defense Council (NRDC) obtained a court injunction against the Department's proposed leasing program--the Energy Minerals Activity Recommendation System (EMARS). NRDC charged that the Department's 1975 Environmental Impact Statement (EIS) inadequately described the coal leasing program, failed to consider proper alternatives, deprived the public of an opportunity to comment because of changes without public notice between the draft and the final EIS, and failed to consider whether there was a need to resume Federal coal leasing. A settlement was negotiated and an amended court order was issued on June 14, 1978, allowing some short-term leasing for existing mines to meet contracts, to prevent the bypass of Federal coal, and for specific hardship cases.

The suit, NRDC v. Hughes, halted new coal leasing until a supplemental EIS was prepared and a new program was adopted by the Secretary of the Interior.

In April 1979, a final EIS was issued and on June 4, 1979, the Secretary of the Interior announced a new program for competitive leasing of Federal coal. It was the result of an intensive 2-year effort to develop a legally defensible, economically feasible, and environmentally sound leasing and management program. Its legislative base lies in the Mineral Leasing Act, the Federal Coal Leasing Amendments Act, FLPMA, the Surface Mining Control and Reclamation Act, the National Environmental Policy Act, the Department of Energy Organization Act, the Clean Air

Amendments, and a series of court decisions. It is also the product of much consultation with other Federal agencies, State and local governments, Indian tribes, the coal industry, and environmental organizations. Regulations to implement the new coal program were published on July 19, 1979 (43 CFR 3400).

The new program is designed to lease Federal coal on a competitive basis, in an environmentally safe and economically efficient manner, and in response to demand. BLM's comprehensive land-use planning process is used to identify areas acceptable for coal leasing, and leasing terms will be developed to ensure that fair market value is received. To qualify for consideration, the areas must have a medium or high coal development potential, pass 20 environmental suitability tests, and contain no other resource values greater than the coal values. If surface mining is contemplated where the coal is owned by the Federal government and the surface by a private individual, prospective lessees must secure the surface owner's approval of the surface mining.

Regional leasing targets will be set and frequently reassessed to merge Department of Energy production goals with advice from State and local governments and the coal industry. When the Secretary of the Interior adopts the final regional leasing targets, Federal and State officials will use them to set planning priorities. Joint Federal-State regional coal teams will use the leasing targets to select and schedule ranked tracts for a 4-year lease schedule.

Progress Report

The first round of leasing under the new program is scheduled for 1981 in the Green River-Hams Fork (Colorado and Wyoming) and Uinta-Southwestern Utah (Utah and Colorado) Regions, and the Alabama Subregion. Leasing in the Power River region (Montana and Wyoming) is scheduled for 1982.

In fiscal year 1979, BLM completed land use planning, applied unsuitability criteria to eliminate conflict areas, considered other resource values, and identified acceptable leasing areas for the Green River-Hams Fork, Uinta-Southwestern Utah, and Alabama sales--all through a process jointly developed with the States. The leasing process for these first four areas--and the others that follow--will be identical and include:

- a request for expressions of industry interests;
- delineation of tracts;
- analysis, EIS scoping, preliminary leasing targets, and public comment;
- tract ranking prior to EIS preparation;
- final leasing target and tract selection;

- EIS with appropriate public participation and consultation; and
- lease sale, the first scheduled for January 1981.

BLM also held 20 lease sales and issued 16 leases for nearly 76 million tons of coal under a "short-term" leasing program developed through a modification of the original NRDC v. Hughes court order.

Several additional coal-related initiatives are underway. First, as a followup to the new policy, BLM has prepared a comprehensive budgetary study. It emphasizes coordination with other BLM natural resource programs in order that coal leasing can move forward in a multiple-use context. The study identifies costs somewhat above $20 million for fiscal year 1980. Further studies project costs of approximately $30 million for fiscal years 1981 and 1982.

Second, BLM launched a study to identify the impacts of mining and transporting coal from the Kaiparowits Plateau in Utah on nearby National Parks and other resource and socioeconomic values. The National Park Service, the Forest Service, and the State of Utah are cooperating in the study. A report is due in the summer of 1980.

Finally, BLM investigated 50 cases of suspected illegal mining of Federal coal in Alabama and three in Maryland, in areas where the Federal government owned the subsurface mineral rights while the surface was privately owned. As a result of the investigation, 31 cases were closed because no unauthorized mining had occurred. One case was closed after the defendant paid trespass damages. Sixteen cases are either still being investigated or are under review. In five cases, formal trespass notices have been issued and action is pending. BLM has instituted a coal trespass detection program consisting of the comparison of aerial photographs. orthophoto maps, land use maps, and other data sources with maps showing Federal coal ownership to determine if surface disturbance indicating possible coal mining is present on those lands. Field inspections of possible trespass sites identified through this comparison process are then conducted to determine if coal trespass has, in fact, occurred. The BLM is revising the mineral trespass regulations and manual to incorporate current authorities and responsibilities. Proposed regulations are presently undergoing BLM and Departmental review prior to publication.

Current Issues

Appraising coal values for leasing is becoming a difficult issue, particularly in single bidder situations in Montana and Wyoming. Under the Leasing-on-Application (formerly called short-term) Program, Federal coal can be offered for sale under emergency conditions to maintain production or prevent the bypassing of Federal coal, or it can be offered outside Federal coal production regions.

The law provides for competitive bidding and requires a minimum royalty of 12-1/2 percent for surface mining, and a minimum bid of the fair market value of the coal. Current regulations require a minimum bonus bid of $25 per acre. At a recent offering, the Department established a minimum bid in excess of $5,000 per acre and the company involved refused to bid on the grounds that the minimum bid was too high. A task force is working to devise leasing procedures that will work in this somewhat contradictory context. Its report is expected in the spring of 1980.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant to the Director, Office of Coal Management

2. Field Administrator: State Directors, especially Colorado, Montana, New Mexico, Utah, and Wyoming, and Director, Eastern States Office

B. Authorizing Legislation

Federal Land Policy and Management Act, P.L. 94-579, 43 U.S.C. 1711, 1712, 1713; Minerals Leasing Act, P.L. 66-146, 30 U.S.C. 201-209 as amended, by Federal Coal Leasing Amendments Act of 1976 P.L. 94-377; and the Act of October 3, 1978, 92 Stat. 2073; Surface Mining Control and Reclamation Act of 1977, P.L. 95-87; 30 U.S.C. 1201-1328 especially 1251-1279; Department of Energy Act of 1977, P.L. 95-91; 42 U.S.C. 7152(b); Clean Air Act Amendment of 1977, P.L. 95-95, 42 U.S.C. 7401 et seq. including P.L. 95-190; The Bureau of Land Management Appropriation Authorization of 1978, P.L. 95-352, 43 U.S.C. 1748

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	20,600	22,500
2. Budget Authority ($000's)	20,961	21,112	21,020

D. Appropriation Structure

1. Title:	Management of Lands and Resources
2. Activity:	Energy and Minerals Management
3. Subactivity:	Energy Onshore
4. Component:	Coal

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	20,203	21,112	17,734	21,020
2. Work Years	305	290	282	380

F. Performance	1978 Actual	1979 Planned	1979 Actual	1980 Planned
Work Units				
1. Environmental Statements	1	5	7	7
2. Environmental Assessments	46	87	56	93
3. Trespass	3	27	30	8
4. Use Authorizations	177	172	158	166

G. Evaluations (Completed)

1. Organization: General Accounting Office
2. Title and Date: Issues Facing the Future of Federal Leasing, June 25, 1979.
3. Major Findings: The report identified six overriding questions which the Comptroller General reported to Congress as necessary for "understanding the broad range of coal leasing issues." These questions cover: (1) balancing coal leasing with interrelated and conflicting national objectives; (2) interactions between the Departments of Energy and Interior; (3) production potential of coal already under lease; (4) coal availability and on-going land use planning and coal exploration; (5) identification, evaluation selection and sale of specific tracts; (6) improvement in timely and orderly development of leases.
4. Subsequent Actions: None, pending the General Accounting Office report described in H below.

H. Evaluations (Underway)

1. Organization: General Accounting Office
2. Subject: Federal Coal Leasing Program

I. Evaluations (Planned)

None

OIL SHALE LEASING

The 25,000-square-mile Green River formation in northwestern Colorado, northeastern Utah, and southwestern Wyoming contains oil shale with a total estimated potential of almost two trillion barrels. Of the total area, 17,000 square miles are believed to have deposits 10 feet thick with an average yield of 25 or more gallons per ton, for an estimated 731 billion barrels of commercially developable shale oil. Approximately 83 percent of the formation is in Colorado, 9 percent in Utah, and 8 percent in Wyoming. Roughly 80 percent of this oil shale is on Federal land. The other 20 percent was transferred to private ownership under the 1872 Mining Act which governed disposal of minerals on public land before 1920 when the Mineral Leasing Act provided new authority for leasing Federal oil shale lands. In the absence of commercial prospects, however, these lands were withdrawn from mineral leasing in 1930. Except for a special sale in 1974, there has been no leasing. In 1968 oil shale lands were withdrawn from location of other minerals under the Mining Act to preclude legal entanglements which the Mining Act can generate (see the discussion of Mining Law Administration under Nonenergy Minerals).

Efforts to develop oil shale have fluctuated greatly over the past 65 years. World War I prompted a flurry of claim staking under provisions of the Mining Act. During World War II, interest in oil shale resulted in the enactment of the Synthetic Liquid Fuels Act of 1944. Under the act, the Bureau of Mines began developing extraction technology at Rifle, Colorado, and Laramie, Wyoming. Since then, industry has taken over refinement and adaptation of technologies.

In 1974, BLM issued four oil shale leases--two in Utah and two in Colorado. The leases were issued as part of the Department's Oil Shale Prototype Leasing Program.

The objectives of this program, among others, were to issue a limited number of leases in order to stimulate the development of commercial oil shale technology by private industry and, at the same time, develop the environmental safeguards and management expertise in oil shale leasing and supervision necessary for a possible mature oil shale industry in the future.

Progress Report

Development of the Colorado leases is proceeding, but development in Utah has been suspended because of litigation over whether the State of Utah or the Federal government has legal title to the land (see Current Issues below).

In 1979, the Oil Shale Environmental Advisory Panel—which was chartered in 1974 and became inactive in 1978—was reestablished to provide advice and recommendations to BLM and the U.S. Geological Survey on the prototype leases. In addition, in response to the President's energy initiatives, BLM is developing a decision document outlining actions necessary (including additional leasing) to meet the President's 1990 production goal of 400,000 barrels of shale oil per day. No additional leasing has taken place pending the completion of the review of the progress of the Prototype Program under the existing leases.

Current Issues

The current issues in the oil shale leasing and management program are legal, environmental, technological, and economic.

The Supreme Court is considering several cases. In one, the State of Utah is asserting title to a large block of oil shale lands as indemnity for mineral lands it could not acquire under the statehood land grants because the United States had made prior transfer of them. In the second case, the Supreme Court has been asked to determine whether oil shale claims filed prior to 1920 constituted the discovery of valuable mineral deposits. The Supreme Court has returned the third case, involving the assessment provisions of the Mining Act and their effect on title to oil shale claims, to the lower courts and the Department of the Interior for further clarification. Interior's Office of Hearings and Appeals now has the case under consideration.

Development of the fundamental technology of oil shale is well advanced. Nevertheless, a wide array of economic, environmental, and some technological uncertainties remain—uncertainties which are unlikely to be fully understood until at least one commercial plant is on line. The Administration is reasonably confident that production of shale oil can reach 400,000 barrels per day by 1990. However, besides a possible lack of sufficient economic incentives, the principal limiting factors in achieving or exceeding this goal may be water availability, water quality, and air quality.

These issues will be analyzed in more detail as development proceeds under the Prototype Program. In the meantime, the Secretary is viewing the need for additional action which may be necessary in 1980 to ensure that both the Prototype Program and the President's 1990 shale oil production goals are achieved.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Energy and Mineral Resources
2. Field Administrators: State Directors, Colorado, Utah and Wyoming

B. Authorizing Legislation

Federal Land Policy and Management Act P.L. 94-579, 43 U.S.C. 1701, et seq.; Mineral Leasing Act of 1920, P.L. 66-146, 30 U.S.C. 181 et seq. especially 241; Bureau of Land Management Appropriation Authorization of 1978, P.L. 95-352, 43 U.S.C. 1748

C. Funding

	FY 1978	FY 1979	FY 1980
1. 4-Year Authorization ($000's)	N/A	900	900
2. Budget Authority ($000's)	927	639	500

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Energy and Minerals
3. Subactivity: Energy Onshore
4. Component: Oil Shale

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	1,007	639	167	500
2. Work Years	6	8	7	7

F. Performance	1978 Actual	1979 Planned	1979 Actual	1980 Planned
Work Units				
1. Environmental Analyses	5	7	3	3
2. Field Examinations	3	3	2	4
3. Compliance Examinations	84	73	34	50

G. Evaluations

See Nonenergy Minerals

GEOTHERMAL LEASING

The geothermal industry is in its infancy. The Geysers field, developed on private land 80 miles north of San Francisco, is probably the most mature example of geothermal technology, providing energy for 650,000 people. The Energy Tax Act of 1978 gave a boost to geothermal development by providing the new industry incentives comparable to those accorded the oil and gas industry. While current production is confined to private lands, some 65 percent of the known or potential geothermal resources of the Nation are on Federal land.

Responsibility for the Federal government's overall geothermal effort is shared by the Departments of the Interior and Energy. The Department of Energy funds research projects and provides loan guarantees for power plants. Under the Geothermal Act of 1970, the Interior Department has major leasing and development responsibilities on Federal land. The U.S. Geological Survey works with State and local governments, other Federal agencies, environmental groups, and industry in the environmental analysis of geothermal development proposals. The Geological Survey also conducts resource evaluations to locate geothermal resources and assists in determining fair market value for use of the resources. BLM issues leases and collects rentals on all Federal land.

Leasing within known geothermal resource areas is based on competitive bonus bidding. The lease size ranges from 640 to 2,560 acres, with any one lessee limited to a total of 20,480 acres in a State. Leases are issued for a 10-year primary term. A rental of $2 per acre is charged for the first 5 years and increased by $1 per acre per year for the remaining 5 years unless the lessee meets certain exploratory requirements. If production is established and maintained, the lease may be extended in increments of 40 years. A 10-15 percent royalty is charged.

Ten-year noncompetitive leases are issued for lands that are outside known geothermal resource areas. They are granted to the first qualified applicant for $1 per acre for the first 5 years and increased by $1 per acre per year for the remaining 5 years unless, as with competitive leases, the lessee meets certain requirements. If the lessee specifies that the lease is for a nonelectrical, direct use, the Secretary of the Interior may issue a lease for less than 640 acres. Direct uses may involve space heating, crop drying, hydroponic greenhousing, shrimp or fish farming, protein production from algae ponds, year-round irrigation in cold climates, and heat for distillation of gasahol. Lessees in Idaho, Oregon, and Nevada are currently using geothermal energy for some of these purposes.

Since leasing started in 1974, 67 wells have been drilled on Federal lands; 17 have been found to be capable of producing steam. All are now shut in pending the development of commercial markets and generating facilities. California, Idaho, and Nevada are the leading States in geothermal efforts.

Progress Report

In fiscal year 1979, approximately 400,000 acres were leased for geothermal development, bringing the cumulative leased acreage to 2.8 million acres. The acreage is covered by 1,260 leases, of which 258 were issued in the period between July 1978 and June 1979. Approximately 30 deep exploratory wells and 100 temperature gradient holes were drilled during the year.

An interagency task force formed to develop a strategy for simplifying lengthy delays in pre-leasing environmental analysis has developed a phased analysis and approval process. Under the new system, environmental analysis is completed for each phase of development separately. The lessee may proceed through each approved phase with the risk that analysis of the next stage may disclose negative factors that would preclude further development. The new procedure allowed 109 leases on national forest land to proceed and promises to reduce the processing time on new development proposals from 24 months to 8 months.

Current Issues

After consideration of a series of bills in both House and Senate and several hearings held in late fiscal year 1979 and early fiscal year 1980, the House Committee on Interior Affairs reported a clean bill, HR 6080, the Geothermal Resources Act Amendments of 1979.

The Administration supports a number of key provisions of the bill:

- modification of the definition of "known geothermal resource area," although the Administration also expressed its strong desire to include competitive interest as one criterion;
- leasing procedures which permit environmental assessment by phases with the lessee taking a lease conditioned upon the possibility that analysis in a subsequent phase may disclose negative factors requiring disapproval, a policy already in effect as a matter of management;
- the use of definite time frames for processing lease applications as long as they are goals and not rigid deadlines;
- enhanced diligence goals which require development of a plan of operations within 3 years from the issuance of a lease and actual drilling within 2 years thereafter.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Energy and Mineral Resources

2. Field Administrators: State Directors, especially California, Nevada, and Idaho

B. Authorizing Legislation

Federal Land Policy and Management Act, P.L. 94-579, 43 U.S.C. 1701 et seq. especially 1701, 1702, 1711, 1712; Geothermal Steam Act of 1970, P.L. 91-581, 30 U.S.C. 1001 et seq.; Bureau of Land Management Appropriation Authorization of 1978, P.L. 95-352, 43 U.S.C. 1748.

C. Funding	1978	1979	1980
1. Authorization ($000's)	N/A	2,800	2,500
2. Budget Authority ($000's)	2,573	2,628	2,420

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Energy and Minerals
3. Subactivity: Energy Onshore
4. Component: Geothermal

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	1,173	2,628	2,814	2,420
2. Work Years	72	82	70	70

F. Performance

Work Units	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Competitive sales	13	10	4	7
2. Competitive leases issued	40	30	23	40
3. Noncompetitive leases issued	300	300	177	175
4. Power plant licensing applications in process	—	2	2	2
5. Compliance checks	200	150	150	150
6. Direct thermal use applications	—	—	—	3

G. Evaluations (Completed)

None

H. Evaluations (Underway)

None

I. Evaluations (Planned)

1. Organization: General Accounting Office
2. Subject: Geothermal Energy: Obstacles and Uncertainties Impede Its Widespread Use

1. Organization: General Accounting Office Draft Report
2. Subject: Leasing and Development of Federal Geothermal Resources

1. Organization: General Accounting Office
2. Subject: How to Speed Development of Geothermal Energy on Federal Land.

NONENERGY MINERALS

Since the early days of mineral exploration and development, the public lands have been the primary source of much of the nonenergy mineral production in the United States. The Federal onshore mineral estate consists of approximately 822 million acres of public and acquired lands and lands that have been patented but in which subsurface mineral rights have been reserved by the Federal government.

Federal minerals are made available under three laws: by mining claim location under the Mining Law of 1872, by lease under the Mineral Leasing Act of 1920, and by sale under the Materials Sales Act of 1947. In the lexicon of public land management, they are often described as locatable minerals, leasable minerals, or salable minerals.

The Mining Law developed from rules based on Spanish, German, and English law instituted during the Gold Rush of 1849. Prior to that time, there was no Federal law covering mining on the public lands so the 49'ers made their own. When the Federal government decided to exert control over mining activity, it applied the same principle that it applied to farmers who had developed land before authorized settlement. It authorized purchase. Thus, the Mining Law of 1872 gives the discoverer of a valuable mineral deposit the right to purchase the complete (fee) title to the claim for $2.50 an acre for placer claims and $5.00 per acre for lode claims. Placer claims involve a glacial or alluvial deposit of sand or gravel containing eroded mineral particles; lode claims involve mineral embedded in hard rock.

The Mining Law does not itself define a valuable mineral deposit. The Department of the Interior and then the Supreme Court defined it by "the prudent man rule" i.e., where minerals have been found and the evidence is of such a character that a person of ordinary prudence would be justified in the further expenditure of labor and means with a reasonable prospect of success in developing a valuable mine.

Until 1976 when FLPMA was passed, claimants filed their location notices only with county clerks and, as a result, the Federal government had no official record of the number, location, or identity of claims or claimants. FLPMA, however, requires a claimant to file with BLM a copy of the location notice filed with local government officials and to file annually thereafter with the local government and with BLM evidence indicating that the claim is not abandoned.

FLPMA also required that claims located prior to October 21, 1976, be recorded with BLM on or before October 22, 1979. By that statutory deadline, 1,087,376 mining claims were recorded with BLM. Wyoming, Utah, Colorado, and Nevada were the States with the heaviest filings.

When the claimant applies for a mineral patent, or the United States itself wants to determine definitively the validity of a claim, a BLM mineral examiner makes an on-the-site mineral examination. If this professional examination leads the examiner to corroborate the discovery, the claim may be patented. If the discovery is not corroborated, the

issue goes before an administrative law judge. Many such contests ultimately get into the courts through the appeal procedures.

In 1955, existing law was amended to provide that control of surface resources on unpatented mining claims would remain under Federal jurisdiction. The Secretaries of the Interior and Agriculture, under that amendment, have authority over vegetative and other surface resources, and may authorize lessees and permittees of the United States access over such claims for the use and equipment of such resources. The amendment also provides that unpatented mining claims may be used for "prospecting, mining or processing operations and uses reasonably incident thereto" only.

Congress passed the Mineral Leasing Act in 1920 removing sodium, phosphate, sulfur, and potassium from the terms of the 1872 Mining Law and provided for leasing rather than claim staking. In 1947, Congress passed the Acquired Lands Mineral Leasing Act to apply the terms of the 1920 Act to all minerals on acquired lands, not just those specified in the 1920 Act.

Under the terms of these acts, BLM has leasing responsibilities for 674 million acres of Public Lands and National Forests and 57 million acres of acquired lands. The law provides for both competitive and noncompetitive leasing. Leases have a 20-year term and may cover a maximum of 2,560 acres. They can be reviewed at 20-year intervals, except for sodium leases which are issued with a preferential right to renew for successive 10-year periods. Prospecting permits are issued prior to the issuance of noncompetitive leases and a valuable deposit discovery entitles the permittee to a preferential right to the noncompetitive lease. A variety of rental and royalty provisions apply, varying with the mineral involved. Unlike coal or oil and gas, there are no diligent development requirements under these leases.

In 1947, Congress passed the Materials Sale Act to make sand and gravel and building stone available for commercial use. They are both sold competitively and noncompetitively. Some sales are made to individuals who are given exclusive rights to a site. Other sales are made for material in common sites. Governmental agencies and nonprofit organizations may be granted such materials at no charge under a free-use permit.

Progress Report

Section 302(h) of FLPMA requires the Department to take actions to prevent unnecessary and undue degradation of the public lands from mining activity, a requirement reiterated in Section 603 with respect to wilderness study areas. BLM published proposed regulations to govern surface management in wilderness study areas in January 1979 (43 CFR 3802) and will publish final regulations in the second quarter of fiscal year 1980. More comprehensive proposed regulations governing mining activity on all public lands (43 CFR 3809) will also be published at that time. These regulations provide a procedure for miners to notify BLM of activity on mining claims and also establish standards for approval of the conduct of mining activities, including reclamation.

New regulations to clarify and consolidate the existing regulations on leasable minerals were drafted in fiscal year 1979. Publication of the draft regulations is expected in the summer of 1980.

Current Issues

The Department of the Interior has long been dissatisfied with the Mining Law of 1872. Under the Mining Law, a claimant may mine without asking for a patent. To this extent, a mining claim is a free-use permit which the claimant issues by staking the claim. This entirely free use is a privilege not accorded any other class of commercial users. If the claimant successfully applies for patent, the United States grants the applicant fee title to the land for $2.50 or $5.00 an acre—prices set a century ago. The Department feels that a more realistic price should be charged and further that only the mineral estate, not the land itself, should be sold. Another alternative, more acceptable to the Department, would be to issue leases for prospecting and mining purposes, although the industry is opposed to such changes.

Mineral trespass, the extraction of Federal minerals without authority or payment, is another long-standing issue, one which generally occurs when a landowner with surface rights sells or extracts subsurface minerals still owned by the Federal government. Though infrequent, such "trespass" can be extensive. The Federal government recently took such an owner to Federal court and recovered damages for the illegal taking of 40,000 cubic yards of gravel. Far more numerous and almost impossible to control are thousands of small casual takings on the open public lands. The important factor is not the loss of revenue but the legacy of disturbed and eroding land such extraction leaves behind.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Energy and Mineral Resources

2. Field Administrators: State Directors

B. Authorizing Legislation

Federal Land Policy and Management Act, P.L. 94-579, 43 U.S.C. 1701 et seq.; Mining Law of 1872, Revised Statutes 2318-21, 30 U.S.C. 21, et seq.; Mineral Leasing Act, P.L. 66-146, 30 U.S.C. 181 et seq., especially 211-214, 216-263, 271-276, 281-287; Materials Sales Act, P.L. 80-291, 30 U.S.C. 601 et seq.; BLM Appropriation Authorization of 1978, P.L. 95-352

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	8,900	11,000
2. Budget Authority ($000's)	6,906	9,313	8,430

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Energy and Minerals
3. Subactivity: Non-Energy Onshore

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	6,021	9,313	7,629	8,430
2. Work Years	214	248	227	248

F. Performance

(See following individual components)

Mineral Leasing

C. Funding	1978	1979	1980
1. Authorization ($000's)	N/A	2,200	2,300
2. Budget Authority ($000's)	2,303	2,313	2,050

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Energy and Minerals Management
3. Subactivity: Non-Energy Onshore
4. Component: Mineral Leasing

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	623	2,313	1,049	2,050
2. Work Years	23	30	23	30

F. Performance

Work Units	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Lease applications processed	14	30	34	40
2. Prospecting permits processed	200	200	200	220
3. Environmental analyses and field exams completed	100	100	100	100
4. Compliance checks conducted	50	50	50	75

Mining Law Administration

C. Funding	1978	1979	1980
1. Authorization ($000's)	N/A	4,800	6,800
2. Budget Authority ($000's)	2,589	4,923	4,310

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Energy and Minerals Management
3. Subactivity: Non-Energy Onshore
4. Component: Mining Law Administrtion

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	2,910	4,923	4,164	4,310
2. Work Years	100	120	115	120

F. Performance

Work Units	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Mineral patent applications processed	120	142	190	190
2. Contest actions completed	100	300	300	300
3. Field exams completed	350	800	800	800
4. Mineral character and validity determinations performed	100	250	250	250

Mineral Materials

C. Funding	1978	1979	1980
1. Authorization ($000's)	N/A	1,900	1,900
2. Budget Authority ($000's)	2,014	2,077	2,070

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Energy and Minerals Management
3. Subactivity: Non-Energy Onshore
4. Component: Minerals Materials

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	2,488	2,077	2,416	2,070
2. Work Years	91	98	89	98

F. Performance	1978 Actual	1979 Planned	1979 Actual	1980 Planned
Work Units				
1. Sales contracts issued	627	595	1,050	1,100
2. Free use permits issued	952	852	950	1,000
3. Trespass cases processed	40	50	48	50
4. Compliance checks conducted	1,017	1,175	1,000	1,100
5. Environmental Assessments comp.	670	555	560	560

G. Evaluations (Completed)

1. Organization: General Accounting Office
2. Title and Date: Legal and Administrative Obstacles to Extracting Other Minerals from Oil Shale, September 1979
3. Major Findings:

   a. Most of the oil shale in Colorado's Piceance Creek Basin is intermingled with sodium and aluminous minerals.

   b. Present mining and mineral leasing laws for the development of low-grade and intermingled minerals are open to varying interpretations which delay multi-mineral development decisions.

   c. An unequivocal statement of Congressional interest in optimal mineral recovery and streamlined development is essential.

4. Subsequent Action: Under Secretary James Joseph responded in a letter of November 27, 1979. It set forth a view that the legal administrative obstacles were not as preclusive as the GAO report implied. On the major recommendation that the Departments of the Interior and Energy detail a policy of optimum recovery of all minerals in oil shale development, the letter stated that an Interior Departmental Petroleum Imports Reduction Task Force agreed with GAO on the importance of sodium development and implied that it would consider combined use if the Department of the Interior studied the feasibility of extending oil shale prototype leasing.

1. Organization: General Accounting
2. Title and Date: Impact of Mining Law Reform on Hardrock Mineral Availability, February 1979
3. Major Findings:

   a. Mining Law is obsolete.
   b. There is a need for a new mining law better meshed with FLPMA.
   c. Hardrock leasing system poses several problems.
   d. The issuance of patents confined to the mineral estate could accommodate FLPMA.

4. Subsequent Action: Deputy Assistant Secretary for Policy, Budget, and Administration, Larry Mierotto responded to a draft of this report by letter on December 30, 1978. The letter made these points:

   a. agreed with GAO that added control of mineral exploration and production was needed to protect the environment;

   b. agreed with GAO on the need to get fair market value for hard rock minerals;

   c. pointed out that the key issue in mining law reform is the amount of discretion the Secretary of the Interior needs to harmonize mining with other land-use responsibilities;

   d. noted that the GAO recommendation for issuing patents for the mineral estate only did not, at least as spelled out, meet four criteria of President Carter's Environmental Message which outlined mining law reform in terms of: (1) mineral leasing; (2) explicit discretion for the Secretary of the Interior; (3) prior approval of mining and mined land rehabilitation plans; (4) and integration of mining activity with multiple use planning and management.

H. Evaluations (Underway)

None

I. Evaluations (Planned)

1. Organization: General Accounting Office
2. Title: Phosphates: A Case Study of a Valuable Depleting Mineral in America

RENEWABLE RESOURCES

RANGELAND MANAGEMENT

Of the 174 million acres of public land administered by the Bureau of Land Management in the 11 Western States, 170 million acres - roughly equivalent to the combined area of the mid-Atlantic and Northeastern United States - are classified as "rangelands." The term "rangeland" refers to lands on which the native vegetation is predominantly grass, grasslike plants, forbs, or shrubs. The character and natural productivity of these rangelands vary considerably, from grasslands, woodlands, and sub-alpine meadows to savannahs, sagebrush plateaus, shrublands, and desert. Taken as a whole, the Nation's rangelands provide a tremendous wealth of products and values: wood products; water; recreational opportunities; base mineral and energy commodities; habitat for wildlife and wild horses and burros; grazing for livestock; extraordinary scientific, historical, and cultural value; and stunning natural beauty. But there is a vast gap today between the potential capability and present productivity of these lands.

The history of the use of these rangelands was for decades the history of the American West - colorful, wide-open, and largely uncontrolled - and the effect of uncontrolled use of the land was dramatic. By the close of the last century, competition among livestockmen and, to a lesser extent, other users of the range had left much of these lands depleted and exposed to the elements. Bitter winters and severe droughts, combined with the deteriorating condition of the rangelands, crippled the range livestock industry, and it became clear that some control over the use of the public land was necessary.

The result was passage of the Taylor Grazing Act in 1934, the first law passed specifically for the purpose of regulating livestock grazing on the public lands and the beginning of the trend of increasing Federal involvement in rangelands management. Under the Act, specific parcels of the Federal range were allotted for grazing use, and efforts were made to bring that use into balance with the productive capacity of the range. The principal shortcomings of the Act were its implied single purpose, to regulate livestock grazing, and its single constituency, the livestock operator. The steady increase in interest in public land resources during the 1960's led to the first articulation of the concept of multiple use management in the Classification and Multiple Use Act of 1964.

Despite these initiatives, by 1974 roughly 135 million of the 170 million acres of rangeland managed by BLM were still in only fair condition or worse. How much the public rangelands have deteriorated and why are matters of considerable dispute. Range scientists generally agree that most of the public range is not declining at this time. However, due to severe past use, much of the public rangelands are stabilized only in fair or poor condition. While there has been some improvement in many areas since passage of the Taylor Grazing Act, the vegetative production of these lands is still far less than their potential. As conflict over what forage was available increased, it became clear that important rangeland values, livestock operations, and the farm and ranch economies of the West would be affected.

Superimposed upon these circumstances was the enactment of the Wild Free-Roaming Horse and Burro Act of 1971, which established a clear national policy that these feral animals would also have a permanent place on the public rangelands and that their requirements must be acknowledged in the management of a tenuous forage production base.

In 1976, FLPMA established the broad policy guidance by which the public lands would be managed and provided for a land management system characterized by detailed resource inventories, comprehensive planning, and full public participation. However, Congress went beyond FLPMA to focus special attention on the Nation's rangelands with the Public Rangeland Improvement Act in 1978. The Congress found, after nearly half a century of uneven Federal involvement in managing the use of rangelands, that:

- the rangelands were still producing below their potential;
- they would remain in unsatisfactory condition - or decline even further - under present funding for management; and that
- the unsatisfactory condition of the public rangelands presents a high risk of soil loss, siltation, desertification, water loss, loss of valuable wildlife and fish habitats, loss of forage for livestock and other grazing animals, degradation of water quality, flood danger, and threats to local economies.

To turn this trend around, Congress authorized "an intensive public rangelands maintenance, management, and improvement program involving significant increases in levels of rangeland management and improvement funding for multiple use values." Moreover, the Congress backed up this mandate with a significant commitment, authorizing an investment of $365 million over the next 20 years for a program of intensified rangeland management, but subject to annual appropriations over the next two decades.

Coincident with these new congressional initiatives, the Bureau of Land Management is also required to respond to a major Federal court mandate. On December 30, 1974, the U.S. District Court for the District of Columbia found, in Natural Resources Defense Council (NRDC), et al. v. Rogers C. B. Morton, et al., that BLM was in violation of the National Environmental Policy Act by failing to prepare environmental statements for livestock grazing decisions for specific areas of the public lands it administers. Consequently, BLM was eventually required by an amended court order in 1978 to prepare 144 individual environmental statements by 1988 covering all lands grazed by domestic livestock (170 million acres).

Progress Report

While managing the public rangelands has been one of the most fundamental responsibilities of BLM, and the Grazing Service before it, this unique combination of events - FLPMA, PRIA, the court-ordered EIS's and,

last year, the additional support provided in the President's Environmental Address - has given new impetus to BLM's rangelands management program.

In November 1979, BLM published for public review "Managing the Public Rangelands," a description of the Bureau's policies, objectives, and procedures for restoring the productivity of the public rangelands and ensuring that the benefits accrue to all potential users. It is the first such comprehensive statement in 20 years.

The central policy described in the document is that BLM will "manage efficiently the basic resources of the public rangelands to improve and maintain their productive capability to serve the full range of natural, social, economic, and environmental needs." The document further states that:

> In carrying out this policy, the Bureau will be guided by the management requirements for protecting and improving the basic soil, water, and vegetation resources; the importance of maintaining a stable and sustainable livestock industry; the need to maintain viable herds of wild horses and burros; and many other public benefits that these resources are capable of providing.

This policy will be implemented in a manner to assure that investment and management programs are fiscally responsible and economically efficient.

The management philosophy underlying this policy is management of rangelands on an ecosystem basis, recognizing that each rangeland unit is a complex ecosystem composed of plant and animal communities and basic soil types all responsive to natural processes (wind, rain, sunlight) and the activities of man. BLM's management process, therefore, is designed to ensure the viability of the resources that compose the foundation of the ecosystem and then to ensure that the benefits of management accrue to all potential users. That has meant a reorientation of the components of BLM's planning process for arriving at rangeland use decisions. For example:

- Inventory work, which in the past focused almost solely on assessments of livestock grazing capacities, will now assess the total production potential of all vegetation species and the soils in the rangeland ecosystem - for livestock, wild horses, wildlife, and a variety of other uses.

- Land use plans, which include the determination of how available vegetation would be allocated among grazing users, will soon integrate a variety of uses that interact with the vegetation resource--not just livestock but also wildlife habitat, soil and water protection, wild horses and burros, and aesthetics, among others.

- Environmental statements, which have been written on specific, and therefore isolated, grazing activity plans, will be written instead, beginning in 1984, on comprehensive Resource Management Plans which cover all resource use decisions.

- Grazing management and range improvements which have largely related to livestock needs will now be designed to enhance the basic resources for a much greater variety of needs and uses.

- Implementation of this new approach covers the full range of traditional issues--wildlife habitat, grazing systems and season of use, erosion and sedimentation, and so forth--but also includes such related matters as water quality, impacts of rangeland management practices, water supply availability, and even air quality issues.

To provide unified professional guidance to managers in the field, the BLM Washington Office Rangeland Management Program was reorganized in 1979 to include management not just of livestock grazing but of basic soil, water, and vegetation resources and wild horse and burro management on the range. Guidance for wildlife management continues to be provided by BLM's wildlife management staff. Responsibility for establishing policies and procedures responsive to the Wild Free-Roaming Horse and Burro Act of 1971, as amended by FLPMA and PRIA, and for managing a nationwide adoption distribution system for excess animals was given to a new Wild Horse and Burro Program under the new Assistant Director for Recreation and Environmental Areas.

The renewed emphasis given by FLPMA and PRIA to range inventory needs, and the analytic requirements of the court-ordered EIS's have provided BLM with an exceptional opportunity to develop, for the first time, a solid base of scientific information on the characteristics, condition, and trend of the basic soil, vegetation, and water resources of the public rangelands. BLM has developed a new soil and vegetation inventory management system to manage the collection and automated analysis of the extraordinary volume of new resource data being compiled for the first time as the foundation of the BLM planning system.

BLM is on schedule for the completion of the 144 EIS's required by the NRDC v. Morton suit. By fiscal 1979, BLM had completed 22 EIS's covering 21 million acres of rangeland in 10 western States. An additional 16 will be completed in fiscal 1980. The grazing EIS's address the environmental impacts of alternative levels of livestock use, systems for managing livestock use to accomplish specific management objectives, and the supporting range development projects. Of the initial 22 EIS's, covering some of the most critical grazing areas, reductions in grazing use have been recommended for less than half of the allotments (48 percent). In 37 percent of the allotments, no change in use was recommended. And in 15 percent of the allotments, grazing increases were recommended. In those allotments where reductions are required, the average reduction from the previous year's actual use is 10 percent.

To improve the quality of the EIS's and the plans from which they are prepared, to ensure that the decisions they lead to are fairly arrived at and sensitively implemented, BLM has expanded its efforts to consult with a wide variety of interests involved in rangeland management--with individual operators, State and local officials, the range science community, and the western Governors.

- BLM has executed a model memorandum of agreement in New Mexico with the Governor, the State Land Board, State legislators, and the livestock operators to establish the ground rules for consultation, cooperation, and coordination in the preparation of allotment management plans pursuant to Section 8 of PRIA.

- BLM has signed a contract to fund a joint project with the Rangelands Subcommittee of the National Governors Association designed to analyze issues of mutual concern, exchange views on the direction and emphasis of the program, identify ways for States to become more effectively involved in the EIS and overall rangeland management program, and seek means to promote better understanding of multiple use range management.

- BLM also signed a contract with the National Academy of Sciences to organize and conduct a two-year technical symposium series on scientific and methodological issues in range management, including vegetation allocation, inventory techniques and suitability criteria, socioeconomic considerations and impact mitigation, grazing systems, range improvements, and livestock management in riparian areas.

- Pursuant to Section 12 of PRIA BLM is implementing the Experimental Stewardship Program in Challis, Idaho, the East Pioneer area of Southwest Montana, and the Modoc/Washoc area of Northeastern California and Northwestern Nevada. Two other areas are being considered. Emphasis to date in these programs has been on smoothing the development and implementation of allotment management plans. At the same time we are working to broaden application of the stewardship concept and to encourage innovation and experimentation with new incentives and working arrangements among users and managers at the local level.

Finally, at the close of the fiscal year, with the release of the rangeland policy document for public review and the completion of a number of key EIS's, BLM held a Mid-Course Review of the rangeland management program. Conducted in February 1980, the workshop brought together BLM and Department of the Interior representatives, representatives of the livestock industry, wildlife and conservation interests, the range science community, resource economists, State governments, and Congressional staffs to scrutinize the BLM rangeland mangement program from inventory through implementation. By brining together the principal parties at interest BLM has provided a mechanism for the identification and resolution of disputes in the Bureau's

management program. The results of this session are being analyzed and may well result in some fundamental changes, particularly the manner in which livestock use decisions are implemented by BLM.

Whatever form the changes take, they must provide a combination of invest ment, management, and use adjustments that reflects the capability of the range and is sensitive to impacts on individual operators and other interests.

Current Issues

BLM is caught between two countervailing pressures: the need for reliable scientific information on range condition and trend and the deadlines of the Court's schedule for completing EIS's. The range science community's principal criticism of the Bureau's rangeland management program has been that inventory data collected over two seasons, even if adjusted for cli- mate, current stage of plant growth, and recent grazing use, is simply not sufficient as a basis for making allocation decisions and ordering adjust- ments in use. BLM's contract with the National Academy of Sciences is designed to resolve the methodological and technical aspects of this problem. At the same time, however, it is clear that BLM needs a range management decisionmaking system which permits prompt management action on the basis of existing information and good judgment without making long-term decisions based on short-term data and without making it difficult to adjust those decisions in response to changing conditions on the ground.

BLM's objective is to improve the productivity of the public rangelands for the benefit of all users, including livestock operators. However, long-term benefits (on the order of 20 years) are of little value to marginal operations which may be seriously and immediately affected by needed short-term livestock cuts. The controversy surrounding Senator McClure's proposal in the Department of the Interior's Fiscal Year 1980 appropriation bill to limit or postpone reductions arises from fear of this prospect. BLM is addressing the issue in two ways:

- As a follow-up to its Mid-Course Review, the Bureau is examining oppor- tunities to phase in reductions gradually and to monitor the results intensively in order to determine more precisely how the individual range ecosystems respond to reductions and investments. Similarly, the Bureau is exploring methods of analyzing different combinations of reductions and investments in range improvements and grazing systems to determine which combination may work best in given situations.

- The Bureau is refining its methodologies for predicting likely socioeconomic impacts at operator, community, and regional levels and is analyzing both the availability and the adequacy of existing agricultural assistance programs for compensating or ameliorating individual operators' short-term financial hardships.

Improving the productivity of the public rangelands involves a mix of three factors: adjustments in use, investments in improvements, and monitoring results. Experience to date illustrates plainly that heavy investments without adjustments, adjustments without investment, and either adjustment or investment without subsequent monitoring will all fail. Though the mix will vary from place to place, generally all three elements are needed. While the adjustment issue is most frequently discussed, other key questions are: what criteria should be used for making investments, and what provision will be made for monitoring?

Currently, BLM investments in improvements are based on the objectives outlined in each EIS, the appropriateness of investments in individual cases, and benefit/cost analysis procedures developed jointly by BLM and OMB in 1976. BLM is currently working with OMB to refine these criteria to ensure that investment dollars are channeled to the improvements that are most efficient and most needed.

Investments and adjustments without monitoring provide no assurance of sustained increases in rangeland productivity. Consequently, a key element in BLM's new rangeland management program and budget strategy is a diligent follow-up of the effects of both changes in livestock use and investments in improvements on the condition of range vegetation. The Bureau cannot afford to make cuts in livestock use or investments without a sustained program of monitoring the effects of actual use, weather, and improvement investments on range condition and trend.

Budget and Performance Analysis (Grazing Management)

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Renewable Resources

2. Field Administrators: District Managers

B. Authorizing Legislation

Federal Land Policy and Management Act, P.L. 94-579, 43 U.S.C. 1701 et seq. especially 1701, 1702, 1711, 1712, 1751-1753; Taylor Grazing Act, P.L. 73-482, 43 U.S.C. 315; Public Rangelands Improvement Act, P.L. 95-514, 43 U.S.C. 1901

C. Funding

	1978	1979*	1980*
1. Authorization ($000's)	N/A	40,300	35,000
2. Budget Authority ($000's)	28,528	32,853	36,860

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Renewable Resources
3. Subactivity: Range Management
4. Component: Grazing Management

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	27,223	32,853	33,851	36,860
2. Work Years	990	1,165	1,196	1,100

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*Authorization figures for 1979 and 1980 include Wild Horse and Burro Program. No breakdown available.

Additional authorization of $11,000,000 from P.L. 95-514, Public Rangelands Improvement Act, for range, soil, water, air, and wildlife in fiscal 1980.

F. Performance

Work Units	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Grazing EIS's completed	9	13	13	16
2. Millions of acres inventoried	20.6	20.0	20.6	21.8
3. AMP's implemented	---	98	60	140
4. AMP's supervised	1,158	1,256	1,218	1,358
5. Grazing permits issued	24,600	24,600	24,600	25,000

G. Evaluations (Completed)

None

H. Evaluations (Underway)

None

I. Evaluations (Planned)

1. Organization: BLM
2. Title or Subject: Range Improvements

Budget and Performance Analysis (Range Improvement)

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Renewable Resources

2. Field Administrators: District Managers

B. Authorizing Legislation

Federal Land Policy and Management Act, P.L. 94-579, 43 U.S.C. 1701 et seq. especially 1701, 1702, 1711, 1712, 1751-1753; Taylor Grazing Act, P.L. 73-482, 43 U.S.C. 315; Public Rangelands Improvement Act, P.L. 95-514, 43 U.S.C. 1901

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	N/A	N/A
2. Budget Authority ($000's)	9,172	8,665	10,620

D. Appropriation Structure

1. Title: Range Improvements
2. Activity: Range Improvements (Public Land, Land Utilization)
3. Subactivity: Range Improvements
4. Component: Grazing Management

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	8,256	8,672	8,775	10,860
2. Work Years	239	276	229	250

F. Performance

Work Units	1978 Actual	1979 Planned	1979 Actual	1980 Planned
Develop				
1. Water Facilities	237	1,000	341	345
2. Miles of fence	282	500	603	400
3. Management facilities	156	200	163	65
4. Projects surveyed & designed	709	750	817	922
Maintain				
5. Water Facilities	6,491	1,800	1,629	1,336
6. Miles of Fence	791	1,200	617	718
7. Management Facilities	173	175	175	102

G. Evaluations (Completed)

None

H. Evaluations (Underway)

None

I. Evaluations (Planned)

1. Organization: BLM
2. Title or Subject: Range Improvements

SOIL, WATER, AND AIR

The objectives of the soil, water, and air management program are to:

- reduce erosion, minimize sedimentation and siltation, promote infiltration, and ensure the stability and productivity of rangeland soils;
- ensure that water of sufficient quantity and quality is available to provide for the basic needs of the vegetation, protect ground water recharge, meet Federal and State water-quality standards, and provide for recognized uses;
- regulate and manage flood plains and wetlands to ensure protection of people and property and to improve and conserve riparian systems; and
- ensure that public land uses are in compliance with air quality standards.

The soil, water, and air management program primarily provides support to other BLM resource programs. This support includes basic inventory and management recommendations for soil, water, and air resources. In addition, the program provides management for control and improvement of unnaturally eroding soil. Because common soil, water, and air information is used by all resource programs, the inventory is centralized in this program to prevent fragmentation of inventory information and reduce coordination and consolidation efforts.

The base program provides capability to conduct studies and research necessary to determine effectiveness of applied management practices and to apply those methods that will be the most successful. Studies relate to water quality and quantity measurements, air quality, and erosion and watershed conditions. Three research projects planned for fiscal year 1980 will provide information to guide future management practices.

The soil, water, and air inventories play a key role in developing land use plans. The inventories are scheduled to support grazing environmental impact statement efforts, energy related development, and other public land uses.

Current Issues

There are an estimated 95,000 current water uses on public lands that must be identified and quantified for current and future use. This information must be available to ensure the continuation of authorized public land uses dependent upon water. Since water is a basic necessity in the multiple use management of public lands, annual water supplies must be available. A lack of available water will result in land use restrictions or discontinuation of dependent water use activities. The soil, water, and air management program

provides BLM with the capability to inventory and conduct field investigations to identify and quantify water uses on the public lands. Increased funding for this purpose will be required starting in fiscal year 1981 and continuing through fiscal year 1984. After this period, a reduced level will be required to maintain the on-going program.

In addition to identifying and quantifying water uses, soil, water, and air inventories required by the court-ordered grazing schedule will depend on the existing $10.5 million funding level through fiscal year 1983, with a reduction expected in fiscal year 1984.

The major water control structures for restoration of the San Simon Valley will be completed in fiscal year 1980. One remaining small structure is planned for completion within the fiscal year 1981 base program. With completion of the water control structure planned for 1981, annual maintenance will be required to protect the multimillion dollar investment and watershed values.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Renewable Resources
2. Field Administrators: District Managers

B. Authorizing Legislation

Federal Land Policy and Management Act, P.L. 94-579, 43 U.S.C. 1701 et seq. especially 1701, 1702, 1711, 1712; Taylor Grazing Act, P.L. 73-482, 43 U.S.C. 315; Soil Conservation and Domestic Allotment Act, P.L. 74-46, 16 U.S.C. 590a; Clean Air Act, P.L. 604, 42 U.S.C. 1857; Federal Water Pollution Control Act, P.L. 95-514; 43 U.S.C. et seq. especially 1252, 1323; Public Rangelands Improvement Act, P.L. 95-514, 43 U.S.C. 1901

C. Funding

	1978	1979*	1980*
1. Authorization* ($000's)	N/A	18,100	19,500
2. Budget Authority	11,898	20,275	19,220

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Renewable Resources
3. Subactivity: Soil, Water, and Air Management

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	11,315	20,275	15,508	19,220
2. Work Years	251	340	324	350

*Additional Authorization of $10,000,000 for FY 1979 for range, soil, water, air, and wildlife under the Sikes Act (P.L. 95-420). Also additional authorization of $10,000,000 from the Sikes Act and $10,000,000 from P.L. 95-514, Public Rangelands Improvement Act, for range, soil, water, air, and wildlife in FY 1980.

F. Performance

Work Units	1978 Actual	1979 Planned	1979 Actual	1980 Planned
Millions of acres inventoried	7.5	20.9	20.9	20.9
Studies conducted	280	455	455	540
Water use identification and quantification	38	1,270	1,270	1,667

G. Evaluations (Completed)

None

H. Evaluations (Underway)

None

I. Evaluations (Planned)

None

FOREST MANAGEMENT

Approximately 117 million acres, one-quarter of the total land under BLM's jurisdiction, is forest land. Most of the land (91 million acres) is in Alaska, but development of Alaskan timber has been deferred until State selections, native claims, withdrawals, and other dispositions are completed. Of the remaining 26 million acres of forest land in the West, 4 million acres are capable of producing high quality commercial timber in quantities sufficient to warrant intensive management. The remaining 22 million acres are not highly valuable for commercial timber but do produce post, poles, and Christmas trees and, of dramatically increasing importance, firewood. These lands are managed less intensively than commercial timber lands, with primary activities aimed at controlling insects, disease, and trespass and providing wildlife habitat and soil and moisture stabilization.

By far the most valuable of the timber lands managed by BLM are the 2.4 million acres in Oregon known as the "Oregon and California railroad grant lands" and the "Coos Bay Wagon Road grant lands." These lands were originally granted in the 1800's to private ownership for railroad and wagon road development but were returned to the Federal government when the developers failed to meet the terms of their land grants. Located in the Douglas-fir region of western Oregon, these are among the most productive forests in the country. They produce 1.172 billion of the total of 1.282 billion feet of timber produced annually on BLM-managed land--about 2 percent of the total national production or 20 percent of western Oregon's production—and enough to build 86,000 three-bedroom houses. The estimated value of the public land timber is $15 billion.

Progress Report

BLM is currently updating land use and timber management plans for the 4 million acres of high-product-value timber lands under its jurisdiction. This process includes the preparation of Environmental Impact Statements for the major forested areas in western Oregon, northern California, and northern Idaho. The new plan for the Josephine Unit in southwestern Oregon was adopted in September 1979 and is the first of 16 plans scheduled to be developed for these States by 1982.

On June 12, 1979, the President directed BLM and the Forest Service to expedite development of these plans to increase timber harvests by departing from the historic, nondeclining even-flow harvest policy. The new policy permits the accelerated harvest of overmature timber, where environmentally and economically feasible. This accelerated harvest, however, will be tempered in some instances by reductions in the cut made for other reasons. Currently, the Josephine plan recommends a modest reduction while the Jackson-Klamath, Oregon, plan—now being developed—could recommend an increase.

The full effect of the new policy will not be known until the land-use plan, timber management plans, and Environmental Impact Statements are completed through 1982. Estimates indicate that with proper investment the current annual harvest level of slightly over 1.2 billion board feet can be increased as much as 10 or 15 percent. The policy could also improve local economic conditions significantly in some areas while lessening unwanted effects on other forest resources and uses.

An appeal has been filed questioning the legality of departing from the nondeclining even-flow policy. As a result, the Oregon State Director suspended the timber sale program in the Josephine Unit and requested the Interior Board of Land Appeals to issue a full force-and-effect order implementing the new policy, which the Board has done.

During fiscal year 1979, 1.194 billion board feet of timber were sold from 53,000 acres of public land under BLM jurisdication; trees were planted on 35,600 acres; 10,000 acres were treated to release or protect existing tree plantations; and thinning to promote growth on high-product-value lands was accomplished on 13,600 acres.

Late in the fiscal year, BLM's Oregon office developed a program of increased responsiveness to the sale of salvageable timber and the residue from standard timber sales. At the same time, BLM is in close contact with the Forest Service on the results it is getting on its Special Salvage Timber Sales Program. The response to BLM's effort has been encouraging, although it is too early to evaluate the results fully. BLM believes that the program will enable it to increase utilization of timber residues and salvage material, thereby providing additional economic use of the resource while ensuring protection of soil, water quality, wildlife, and access controls.

Finally, BLM has agreed to fund 15 percent, or $1.88 million, of a forest nursery that the Forest Service is establishing near Medford, Oregon. This financial contribution will entitle BLM to six million seedlings a year, enough to reforest 9,000 acres annually. The first seedlings will become available in fiscal year 1981.

Current Issues

A fundamental issue in any forest management program is the ability to meet predetermined annual harvest objectives. The formula for determining the annual harvest is a complex one, involving reforestation rates, thinning, salvage, brush and hardwood control and stand conversion goals. A change in any one of these elements will of necessity affect the other elements and the annual harvest target.

Certainly the most controversial aspect of forest land management--on public lands managed by BLM and elsewhere--is the use of herbicides. Following the release of an Environmental Statement on the use of herbicides in western Oregon in March 1979, BLM discontinued the use of Silvex, or 2,4,5-TP. BLM discontinued the use of 2,4,5-T in the early 1970's. The current policy is to use non-chemical alternatives in place of herbicides to the maximum degree feasible and to use approved herbicides (such as 2,4-D) only under stringent controls to minimize risks to human health. The issue of the relative cost of mechanical and chemical methods of controlling unwanted growth is one of continuing controversy. If the Federal government finds it in the interest of public health to decrease further the use of the stillapproved herbicides and if studies show that alternative control is more expensive, then either the annual harvest rate will have to be reduced with resultant economic impacts or the levels of investment in timber management will have to be increased to sustain the annual harvest rate.

BLM administers approximately 20 million acres of forest lands that do not produce commercial sawtimber and other manufactured products. However, these lands contain an estimated 200 million cords of wood or the energy equivalent of 761 million barrels of fuel oil. In addition, commercial timber harvesting creates considerable residues with significant energy potential. Already there has been a noticeable increase in fuel wood cutting. BLM plans to explore these energy opportunities. This can be done through adequate inventories and economic, social, technological, and environmental studies. Where opportunities are significantly beneficial, BLM will report them to the Administration and the Congress.

Budget and Performance Analysis: Forest Management (O&C)

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Renewable Resources

2. Field Administrators: District Managers, Salem, Eugene, Coos Bay, Roseburg, and Medford, Oregon

B. Authorizing Legislation

Conservation of Timber on Certain Lands in Oregon Act of 1937, P.L. 75-405, 43 U.S.C. 1181; Federal Land Policy and Management Act, P.L. 94-579, 43 U.S.C. 1071 et seq. especially 1701, 1702, 1711, 1712

C. Funding

	1978	1979	1980
1. Authorization	N/A	N/A	N/A
2. Budget Authority ($000's)	55,000	55,000	55,000
3. Appropriation ($000's)	43,145	48,387	55,000

D. Appropriation Structure

1. Title: Oregon and California Grant Lands
2. Activity: Renewable Resource Management
3. Subactivity: Timber Management and Timber Development
4. Component: Forest Management, Western Oregon; Forest Development

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	36,626	60,119	55,922	62,700
2. Work Years	1,014	1,232	1,325	1,362

F. Performance

Work Units

Timber Offered (MBF)	1,140,000	1,107,300	1,123,197	1,098,220
Acres Reforested	33,624	35,284	33,252	35,903
Land Treatment (acres)	2,736	30,370	9,737	20,500
Thinning (acres)	9,059	11,330	9,884	5,200

G. Evaluations (Completed)

1. Organization: General Accounting Office
2. Title and Date: Small Business Set-Aside Sales in Western Oregon
3. Major Findings: GAO found that set-aside sales were of higher quality than open sales yet returned less revenue.
4. Subsequent Action: In reviewing the report, BLM discovered that the GAO compared set-aside sales with all types of sales. When BLM compared set-aside sales to open sales from which the set asides are chosen, there was no discrepancy. There have been, therefore, no changes in policy or practice.

Evaluations (Underway): None

Evaluations (Planned): None

Budget and Performance Analysis: Forest Management (Management of Lands and Resources)

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Renewable Resources

2. Field Administrators: District Managers

B. Authorizing Legislation

Federal Land Policy and Management Act, P.L. 94-579, 43 U.S.C. 1701 et seq. especially 1701, 1702, 1711, 1712; Bureau of Land Management Appropriation Authorization of 1978, P.L. 95-352, 43 U.S.C. 1748; Material Sales Act of 1947, P.L. 80-271, 30 U.S.C. 601

C. Funding	1978	1979	1980
1. Authorization ($000's)	N/A	8,800	8,800
2. Budget Authority ($000's)	9,071	9,241	9,000

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Renewable Resources and Protection
3. Subactivity: Forest Management

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	8,611	9,241	8,697	9,000
2. Work Years	341	300	292	300

F. Performance

Work Units

1. MBF Timber Offered	78,000	94,000	71,000	93,000
2. Acres Reforested	3,365	2,607	2,423	3,030
3. Land Treatment (acres)	377	1,296	1,297	600
4. Thinning (acres)	3,382	4,967	3,718	3,770

G. Evaluations (Completed, Underway, Planned)

None

WILDLIFE

The public lands are home to one out of every five of the big game animals in the United States, including most of the caribou, brown and grizzly bears, and desert bighorn sheep, 50 percent of the moose, 65 percent of the mule deer, and 45 percent of the antelope. In addition, BLM manages 47 million acres of wetlands, 30 million acres of riparian habitat, 669,000 miles of perennial streams, and nearly 5 million surface acres of lakes and reservoirs. These areas contain over 90,000 miles of prime trout and other sportfish streams. BLM lands support hundreds of non-game wildlife as well, and other game species. In short, BLM manages more wildlife habitat than any other Federal or State agency.

The settlement of the West had a dramatic effect on wildlife and wildlife habitat during the last century. When States began to manage fish and game through hunting regulation and other programs, fish and wildlife populations began to recover from a long decline, and the adequacy of habitat--wildlife's source of food and shelter--became an overriding concern. The Taylor Grazing Act, which first brought management to the public lands, recognized that wildlife habitat was among the lands' leading values and required that adequate wildlife forage be provided. Still, for at least 30 years, forage allocation was often arbitrary. BLM began giving serious professional attention to wildlife needs in the mid-1960's, when a wildlife management division was formed and wildlife biologists were recruited to serve in state and district offices.

FLPMA recognized wildlife as one of the principal uses of the public lands. It also further increased BLM's authority, as well as its responsibility, to manage, protect, and enhance wildlife and fishery resources. Since the passage of FLPMA in 1976, BLM has increased its effort to inventory, plan for, and implement on-the-ground management and use of terrestrial and aquatic wildlife habitat. Wildlife staffs work closely with other BLM program staffs to develop and implement land-use planning strategies, to identify protective provisions in leases, licenses, and permits, and to develop and implement management plans that provide intensive management for key wildlife habitat areas. BLM biologists are also incorporating wildlife provisions in plans for livestock grazing, mining and mineral development, and timber management, to name just a few.

Endangered species legislation passed in the late 1960's and 1970's added a new dimension to management of the Nation's wildlife by providing a means for conserving and managing ecosystems essential to fauna and flora in danger of extinction. It clearly directed Federal agencies to protect the continued existence of such threatened and endangered species. Some 60 Federally listed endangered plant and animal species have been identified on the public lands. A complete inventory of the location and habitat of a selection of these species is due to be completed in 1981.

BLM is a full participant in 15 interagency teams working to increase endangered species populations to the point where they can be removed from the endangered species list. In addition, BLM completed some 1,200 consultations with the Fish and Wildlife Service and Marine Fisheries Service in 1979 regarding proposed actions with potential impacts on threatened or endangered species and their habitats.

BLM works in partnership with State wildlife agencies to carry out its mission of managing fish and wildlife habitats on the public lands and the Outer Continental Shelf and ensuring that wildlife needs are considered in all land-use planning decisionmaking. The Sikes Act of 1974 added impetus to such cooperative planning and management with State wildlife agencies by authorizing conservation and rehabilitation programs on public lands and directing the Secretary of the Interior to implement cooperative programs for fish and wildlife with State fish and game agencies.

BLM has executed memoranda of understanding and numerous cooperative agreements with 14 Western State fish and game agencies and one State in the East. To summarize these arrangements, the States are responsible for wildlife population management, while BLM is responsible for managing the habitat on public lands. Habitat for non-game and game species on the public lands is identified for management in each State. The agencies in turn work toward accomplishing the objectives set for each species and its habitat. By stabilizing and improving habitat on public lands, BLM helps compensate for population losses caused by declining habitat on private lands. BLM also acts in an advisory capacity to States regarding wildlife populations. The interdependence of habitat and population management makes the close coordination between BLM and the States a critical element in BLM's wildlife management program.

Progress Report

The growth of BLM's commitment to protecting and enhancing wildlife habitat and ensuring that wildlife requirements are considered in land use and activity plans, Environmental Assessments, and projects proposals is reflected in the steady increase of manpower and funding allocations for wildlife programs in recent years. The number of work years devoted to wildlife management, for example, was 227 in 1978, increased to 341 in fiscal year 1979, and is planned at 389 for fiscal year 1980. Overall, wildlife funding has increased 311 percent since FY 1977.

There have been continuing efforts to strengthen BLM's partnership with the States. Some highlights of these efforts are:

- expanding State input into land use planning by placing greater reliance on State species inventories and increasing consultation at key milestones in the planning process;

- seeking more State input in the formulation of priorities, plans, and implementation activities for Sikes Act cooperative habitat management projects (142 Habitat Management Plans are now being implemented in cooperation with 12 State agencies on 20 million acres of land); and

- increasing emphasis on funding on-the-ground habitat improvements and management actions under FLPMA, the Public Rangelands Improvement Act, and the Sikes Act.

Special attention was also focused in 1979 on several key wildlife management activities, among them:

- The Snake River Birds of Prey National Conservation Area proposal. BLM issued a draft EIS in June 1970 on its proposal to expand the boundaries of the Birds of Prey Natural Area and Study Area in Idaho to meet the birds' habitat needs. This is one of the most significant ecosystems in the world for hawks, owls, eagles, and other birds of prey and was highlighted as an area of national concern in the President's Environmental Message of 1979. Draft legislation to create a national conservation area and provide permanent protection for this unique wildlife habitat is being prepared.

- Bighorn Sheep Restoration and Management. Populations are being reestablished in five states (Arizona, Colorado, Nevada, New Mexico, and Utah) and management programs are being implemented on key habitats in two States (Idaho and Wyoming).

- California Desert Wildlife Management. BLM developed a draft desert-wide management program and EIS for 25 million acres of the California Desert for, among other things, the management and protection of desert wildlife.

- Tule Elk Restoration in California. BLM cooperated with the California Department of Fish and Game and others to develop and implement statewide and site-specific plans which are successfully restoring Tule Elk populations to a viable level and preventing their becoming a threatened or endangered species. In accordance with the 1976 joint resolution regarding Tule Elk, annual reports are completed and presented to Congress.

- Proposed Withdrawals for Desert Tortoise. BLM has proposed, as authorized by FLPMA, the withdrawal as a natural area of 28,000 acres of exceptionally valuable habitat to protect desert tortoise populations in Kern County, California.

- Study of the California Condor. On December 17, 1979, BLM signed a cooperative agreement with the State of California, U.S. Forest Service, Fish and Wildlife Service, and the Audubon Society to complete a detailed study of the status of the condor designed to identify habitat locations and possible methods to help reestablish the species.

- Endangered Species Reintroductions. BLM continued to work with States and other agencies on the three-year-old program to reestablish the peregrine falcon. Programs to reintroduce the Colorado squawfish in selected sites in the Colorado River and woundfin minnows into the Gila River in Arizona are planned for fiscal 1980 and 1981 respectively.

- Inventory and Planning. BLM inventoried almost 47 million acres of wildlife habitat, completed 13 wildlife Habitat Management Plans and revised 40, and completed over 2,000 wildlife studies and research projects.

- Habitat Improvement. BLM accomplished some 2,000 acres of vegetation manipulation through seedings, plowing, burning and other methods; 400 acres of land treatment; and 50 miles of protective fencing. Ninety new water facilities were installed, and maintenance was provided for approximately 500 acres of vegetation, 260 water facilities, 80 miles of fence, and 60 management facilities.

Current Issues

The most difficult issues confronting BLM's wildlife program spring from the conflicts between the public's concern for the preservation of wildlife habitats and endangered species and its ever-increasing demands for commodities like water, minerals, red meat, and energy.

Competing demands for water are a frequent source of conflict among the Federal Government, the States, and private landowners, especially in the West. In this regard, BLM will continue to work to develop better methods of determining needs for water reservations for wildlife and of providing defensible estimates for land-use planning and environmental analyses.

Another area where competing demands create wildlife issues is energy development. For example, recently accelerated plans for coal and energy development could threaten some wildlife habitats in high value energy areas. In coal areas, for example, BLM has implemented a comprehensive inventory program on 2.5 million acres of high value coal lands to expedite the identification of lands suitable or unsuitable for coal leasing.

Competition between different animal species for the same habitat can also lead to conflict. Such has been the case with wolf control practices related to the State of Alaska's moose and caribou management programs. Secretarial Orders have closed certain public lands in Alaska to aerial gunning of wolves in compliance with rulings of the U.S. District Courts. The Department of Justice has filed appeals and summary briefs with the U.S. Court of Appeals.

Animal damage control programs are also sources of controversy in the western States. For example, since 1931, the Federal government has been involved in the control of coyote populations, utilizing methods from aerial gunning to trapping, in order to protect sheep, cattle, and goats that graze on public land. The Secretay of the Interior's formal policy announcement on November 9, 1979, provoked criticism from livestock interests unhappy with the balance struck between livestock protection needs and the need to preserve and protect wildlife resources. This has been a recurrent issue, and BLM is working cooperatively with other agencies to resolve these conflicts to the extent possible.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Renewable Resources
2. Field Administrators: District Managers

B. Authorizing Legislation

Federal Land Policy and Management Act, 43 U.S.C. 1701 et seq. especially 1701, 1702, 1711, 1712, P.L. 94-579; Taylor Grazing Act, 43 U.S.C. 315, especially 315(h), P.L. 73-482; Endangered Species Act, 16 U.S.C. 1531 et seq. especially 1533, 1535-36, P.L. 93-205; Sikes Act, 16 U.S.C. 6700, P.L. 95-420; Public Rangelands Improvement Act, 43 U.S.C. 1901, P.L. 94-514; Bureau of Land Management Appropriation Authorization, P.L. 95-352; Joint Resolution Regarding Tule Elk, 16 U.S.C. 673

C. Funding

	1978	1979*	1980*
1. Authorization ($000's)	N/A	12,300	14,900
2. Budget Authority ($000's)	7,788	12,244	15,880

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Renewable Resources and Protection
3. Subactivity: Wildlife Management

*Additional $10,000,000 authorization FY 1979 and FY 1980 for range, soil, water, air, and wildlife from Sikes Act; additional $11,000 from Public Rangelands Improvement Act for range, soil, water, air, and wildlife in FY 1980.

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	7,451	12,244	11,161	15,880
2. Work Years	243	362	364	400

F. Performance

Work Units	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Million of acres inventoried	6.7	7.6	17.7	22.7
2. HMP's implemented	8	30	13	27
3. Millions of acres of wildlife habitat improved	1.3	6.0	1.7	3.5

G. Evaluations (Completed)

1. Organization: Bureau of Land Management
2. Title and Date: Wildlife Program, 1977

H. Evaluations (Underway and Planned)

None

RECREATION AND ENVIRONMENTAL AREAS

RECREATION MANAGEMENT

The primary objectives of BLM's recreation program are to manage and protect public land resources that are used for recreational activities, such as off-road vehicle (ORV) sports, river rafting, hiking, camping, hunting, and fishing, and to aid visitor enjoyment and safety by informing the public about the values and uses of the public lands.

Public recognition of the recreational values of the public lands has grown rapidly in recent years. The Classification and Multiple Use Act of 1964 recognized that major portions of public lands in the western States and Alaska possessed values that should be managed for multiple uses, including recreation, and provided ways to designate and segregate certain lands primarily for recreational use.

Increased leisure time, awareness of public land values, increased mobility, and other factors have pushed the number of visitors from 12 million in 1964 to 80 million in 1979.

Many recreational resources--such as rivers, trails, roadless areas--often have national as well as local significance. As part of its multiple-use planning process, BLM conducts studies to evaluate the significance of such areas to ensure that they are effectively managed and, in some instances, to provide information for designating them as part of the national systems of wild and scenic rivers or scenic and historical trails.

While virtually all of the public lands managed by BLM are open to recreational use, areas with specially recognized recreational values include:

- 30 special recreation areas totaling 3.1 million acres;
- California Desert Conservation Area with 12 million acres;
- 45 recreational and whitewater rivers with 2,500 miles suitable for recreation use. Four rivers--the Rio Grande, Rogue, Missouri, and American--are designated as National Wild and Scenic Rivers and 16 more are being considered for inclusion in the system;
- 216 miles of designated National Recreation Trails; over 5,000 additional miles of trails crossing public lands are under study;
- 250 developed recreation sites with 4,000 units for camping and 250 primitive campgrounds;
- King Range National Conservation Area with over 41,000 acres and 30 miles of Pacific beach;

- 90 million acres of land in Alaska with potential access by the Alaska pipeline road.

BLM issues special recreational permits for all commercial or competitive recreational uses, for any organized event that involves 50 or more motorized vehicles, and for special areas where use must be controlled as part of prudent land management.

A major recreational activity on the public lands is the use of ORV's—motorcycles, minibikes, trail bikes, snowmobiles, dune buggies, all-terrain vehicles, and others. The widespread use of such vehicles began in the late 1960's. While the Bureau recognizes ORV's as a legitimate recreational activity, they are frequently in conflict with other types of recreational activity and other values (environmental, historic, cultural, etc). In response to this growing problem, President Nixon issued Executive Order 11644 on February 8, 1972, to "establish policies and provide for procedures that will ensure that the use of off-road vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands."

In 1973, under its existing recreation management regulations (43 CFR 6000, January 18, 1969), BLM designated 12 million acres of the California Desert as either open, limited, or closed to ORV use in an effort to begin controlling ORV activity. On May 15, 1974, regulations (43 CFR 6290) implementing Executive Order 11644 became effective. These regulations were contested in November 1974 by the National Wildlife Federation (National Wildlife Federation (NWF) v. Morton, et al) on the basis that they failed to conform with requirements of the Executive Order. The court ruled in favor of NWF in May 1975 by finding that the Secretary had failed to set a date for completing designations of all public lands as required by the order and had paraphrased rather than quoted criteria set in the order for such designations. The court order also required a revision of the Departmental Environmental Impact Statement (EIS) on ORV use on all Federal lands.

The Department of the Interior completed the EIS on April 21, 1978, and issued revised ORV regulations (43 CFR 8340) on July 16, 1979, incorporating specific provisions of the court order, Executive Order 11644 (as amended by Executive Order 11989), and the EIS. President Carter issued EO 11989 on May 24, 1977, to clarify BLM's authority by directing that areas be closed immediately when ORV use would cause considerable adverse effects on the soil, vegetation, wildlife habitat, or cultural or historic resources of the areas.

The Bureau also manages several officially designated wild and scenic rivers. The Wild and Scenic Rivers Act of 1968 designated 44 miles of the Rio Grande River in New Mexico and 47 miles of the Rogue River in Oregon as national wild and scenic rivers. The Bureau also manages wild and scenic segments of the Missouri River in Montana and the American River in California. About 350,000 people visited these four rivers, which total about 250 miles, in fiscal year 1979.

In addition, under authority provided in the National Trails System Act of 1968, BLM is studying and developing a resource management plan for the Pacific Crest National Scenic Trail in Oregon and California. The trail segments for which BLM has authority total 174 miles--42 in southern Oregon and 132 in southern California. Thirty-nine miles of the trail have been completed in Oregon and 59 in California.

Progress Report

Open, closed, or limited designations for ORV areas were given to slightly more than 2.5 million acres, primarily in Alaska, Colorado, Montana, New Mexico, Oregon, and Utah in fiscal year 1979. About 10 areas--totaling over 50 thousand acres--were closed to ORV's in California, Oregon, Montana, and Washington, because of emergency conditions, such as weather problems, fire damage, and wildlife harassment.

In fiscal year 1979, BLM sent to Congress a management resource plan for the Upper Missouri Wild and Scenic River in Montana. The plan provides the basic guidance of managing the river corridor and classifies the various stretches of the Upper Missouri into wild, scenic, and recreational areas.

Finally, BLM participated in developing management plans for the Continental Divide (Montana, Idaho, Wyoming, Colorado, and New Mexico); Iditarod (Alaska); Lewis and Clark (Montana, Idaho, and Oregon); Oregon (Wyoming, Idaho, and Oregon); and Mormon-Pioneer (Wyoming) national trails.

Current Issues

The major issue in the recreation program is enforcing the closed and limited ORV designations on public lands. With the large number of highly mobile people on vast areas of public lands, enforcement efforts are ineffective. BLM is developing a comprehensive public-education program to explain these designations to the public and promote safe and prudent ORV use through public service announcements on radio and television, brochures, and personal contact in the field. A major goal of this effort is the development of a more responsible "land ethic" in ORV users. BLM is developing a similar public education program to explain safety and protection restrictions on the use of wild and scenic river areas on the public lands.

A project was begun in FY 1979 to review the existing Bureau recreation policy and provide recommendations to the Director for a revised policy that more adequately responds to recreation challenges of the 1980's. A policy development committee was formed to assist in this effort. It is composed of recreation managers from other Federal agencies, individuals from major universities, State officials and private citizens. Recommendations for policy revisions will be submitted late in FY 1980.

Finally, gaining easements across private land is becoming a problem in completing the development of the Pacific Crest Trail. Condemnation will be necessary to obtain easements across some parcels of private land.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Recreation and Environmental Areas

2. Field Administrators: State Directors and Director, Eastern States Office

B. Authorizing Legislation

Federal Land Policy and Management Act of 1976, P.L. 94-579, 43 U.S.C. 1701, et seq.; Taylor Grazing Act, 43 U.S.C. 315a; Endangered Species Act, 16 U.S.C. 1531 et seq.; Wild and Scenic Rivers Act, 16 U.S.C. 1281c; Land and Water Conservation Fund Act, 16 U.S.C. 1-6a; National Trails System Act, 16 U.S.C. 1241 et seq.; and Bureau of Land Management Appropriation Authorization, 43 U.S.C. 1748.

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	---	---
2. Budget Authority ($000's)	8,560	8,456	7,770

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Renewable Resources
3. Subactivity: Recreation Management

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	4,272	8,456	4,882	7,770
2. Work Years	168	250	196	230

F. Performance

Work Units	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. River & Trail Studies and Plans	13	16	6	6
2. River & Trail Permits	240	240	1,336	1,500
3. Off-Road Vehicle Designations (million acres)	0	10	2.5	12.0
4. Off-Road Vehicle Permits	330	330	166	170
5. Visual Project Compliance	2,000	2,000	2,000	2,000
6. Recreation Inventory (million acres)	12	12	9.4	11.8
7. Recreation Permits	1,000	1,000	888	1,200

G. Evaluations and Audits (completed)

1. Organization: Bureau of Land Management, Washington Office

2. Title and Date: Recreation Management Program Analysis, October 11, 1979

3. Major Findings: BLM's Recreation Management Program is a paradoxical combination of great opportunities and serious problems. Opportunities lie not only in the recreational resources on public lands and their potential for satisfying soaring public demand, but also in helping BLM build the kind of broad public support necessary to accomplish its overall mission of multiple use management. Problems center around a historic lack of management emphasis, weak program development, and grossly inadequate funding. These problems are closely interrelated and must be dealt with comprehensively in any realistic strategy for program revitalization.

4. Subsequent Action: BLM is evaluating the findings and, where possible, will take necessary actions to strengthen the program.

H. Evaluations and Audits (Underway)

None

I. Evaulations and Audits (Planned)

None

WILDERNESS REVIEW PROGRAM

FLPMA made wilderness preservation and management a part of the multiple-use mandate for the public lands. It required BLM to carry out a comprehensive review of the wilderness characteristics of the public lands to identify potentially suitable candidates for the National Wilderness Preservation System.

With public participation provided throughout, the wilderness review process has three major phases: inventory, study, and report to Congress.

The inventory is conducted in two parts. The initial inventory in the contiguous western States has been completed and resulted in releasing quickly 117 million acres of public land areas that obviously lacked wilderness characteristics. The second or intensive inventory is being conducted on the remaining areas, which needed more detailed field examination, to determine whether they possess wilderness characteristics as defined in the Wilderness Act of 1964.

Areas found to have wilderness characteristics--called wilderness study areas--will be studied in detail to determine their potential uses and whether they are suitable for preservation as wilderness. The lands deemed to be suitable will be surveyed for mineral values by the U.S. Geological Survey and the Bureau of Mines. Based on the study, the Secretary of the Interior will submit recommendations on each wilderness study area to the President. The President, in turn, will send his recommendations to Congress within the next 2 years. Only Congress can designate an area as wilderness to be included in the National Wilderness Preservation System.

The wilderness review applies to all public lands administered by BLM except:

- Lands where the United States owns the minerals but the surface is not Federally owned
- Lands being held for the benefit of Indians, Aleuts, or Eskimos
- Lands tentatively approved for State selection in Alaska
- Lands on the Outer Continental Shelf
- Oregon and California grant lands that are managed for commercial timber production.

In addition to the overall wilderness review, FLPMA directed the Secretary of the Interior to make recommendations to the President by July 1, 1980, on 55 areas (about 507,000 acres) formally identified in 1975 or before as natural or primitive areas. BLM is currently reviewing these areas--scattered throughout the western States and Alaska—in order to make recommendations to Congress on their suitability for possible inclusion in the National Wilderness Preservation System.

FLPMA states that during the review the lands must be managed "in a manner so as not to impair the suitability of such areas for preservation as wilderness". A special exception to this mandate covers mineral and grazing uses, which may continue under a "grandfather" provision in the same manner as they were on the date FLPMA was enacted. BLM is also mandated to prevent unnecessary or undue degradation of the lands.

FLPMA also states that any public lands designated as wilderness by Congress will be managed under provisions of the Wilderness Act of 1964 that apply to wilderness areas of the national forests.

Progress Report

The initial inventory in the contiguous western States was completed in fiscal year 1979. Of the estimated 174 million acres of public lands subject to the wilderness inventory, over 117 million acres were determined to lack wilderness characteristics; slightly less than 49 million acres were still under inventory at yearend; and about 7.3 million acres were identified as wilderness study areas of which about 6 million acres are already being studied.

To relieve some of the impact of the review process on ongoing projects--especially energy-related ones—certain inventories are being accelerated. One major area being accelerated is the potentially valuable oil and gas region in the Overthrust Belt, a twisting geological formation which stretches from the northern Rocky Mountains through Montana, Wyoming, Idaho, Utah, Nevada, and Arizona. The accelerated review has resulted thus far in the release of nearly 8 million of the 11.4 million acres of Public Lands in the Overthrust Belt and the proposed release of an additional 2 million, leaving about 1 million proposed for the wilderness study and 400,000 already identified as wilderness study areas.

BLM issued a wilderness review document, Interim Management Policy and Guidelines, on December 12, 1979. It is a guide for managing lands under wilderness review to maintain their suitability for possible wilderness designation, while recognizing valid existing rights and "grandfathered" mineral and grazing uses. New post-FLPMA uses will be carried out in accordance with the guide.

Considerable progress was made on preparation of reports to the Secretary on the formally designated primitive or natural areas on which the Secretary must report to the President on July 1, 1980. The first recommendation from that group of 55 areas came from the Arizona State Office, which recommended wilderness status for Aravaipa Canyon Primitive Area. The Bureau also determined that final recommendations will be provided on 30 of

the 55 areas by the July 1, 1980 deadline. Recommendations on the other 25 areas will be deferred for a variety of reasons, most of which involve wilderness inventories or studies on lands adjacaent to the designated primitive or natural areas. The 25 areas will be reported over the next several years with a recommendation either to include or to exclude from the national wilderness system or to combine them with other study units.

Current Issues

A major issue is how BLM can minimize the period of uncertainty in wilderness review areas subject to important resource conflicts. The wilderness inventory was designed to resolve this uncertainty promptly for lands that lack wilderness characteristics. As soon as the intensive inventory is completed, a Bureauwide schedule for wilderness studies will be developed, with public participation. Areas with the most important resource conflicts will be scheduled for an early study, and BLM will attempt to complete all studies well before the 1991 deadline set by FLPMA. A report on the studies will be made periodically to Congress.

Another issue is the question of the wilderness review in Alaska, which has not started because the Department's fiscal year 1979 appropriation bill barred the use of funds for such a review. This issue is currently under discussion in Congress in connection with the Alaska National Interest Lands Conservation Act.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Recreation and Environmental Areas

2. Field Administrators: State Directors and Director, Eastern States Office

B. Authorizing Legislation

Federal Land Policy and Management Act of 1976, P.L. 94-579 43 U.S.C. 1701, 1782; Bureau of Land Management Appropriation Authorization of 1978, P.L. 94-352, 43 U.S.C. 1748

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	9,500	9,500
2. Budget Authority ($000's)	N/A	9,867	9,840

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Renewable Resources and Protection
3. Subactivity: Wilderness Management

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	3,547	9,867	11,714	9,840
2. Work Years	65	300	310	300

F. Performance

Work Units

Inventory (million acres)	---	---	---	174

G. Evaluations (Completed, Underway, and Planned)

None

NATURAL HISTORY, CULTURAL, AND VISUAL RESOURCE PROGRAM

BLM's Natural History, Cultural, and Visual Resource Program is designed to protect, enhance, and provide appropriate care for:

- Natural History Resources--natural resources having significant scientific and educational long-range values;
- Cultural Resources--fragile, nonrenewable resources with scientific and socio-cultural values, including prehistoric and historic remains;
- Visual Resources--scenic land, water, vegetative, and man-made features.

National emphasis on preserving elements of the Nation's natural, cultural, and visual heritage is increasing. Leadership and guidance for this activity have been provided by Congress through a series of legislative actions, beginning with the establishment of Yellowstone National Park in 1872, the establishment of additional parks and refuges during the first half of the 20th century and accelerating with the passage of wilderness and wild and scenic river legislation in the 1960's and the passage of the National Environmental Policy Act of 1969. Congress made BLM a full partner in this movement with the Federal Land Policy and Management Act of 1976.

BLM is one of many Federal, State, local, and private agencies that have active programs to protect natural history, cultural, and visual values. To ensure the development of a complete national system and to eliminate duplication of effort, BLM works closely with other agencies to identify the type of areas to be included in the system, to determine which type areas are already being protected, and to concentrate on closing gaps in the system. The coordination of these programs at the national level is vested in Heritage Conservation and Recreation Service (HCRS).

The natural history function in BLM provides a framework for the identification, selection, designation, and protection of a system of Natural Preserves--areas having significant scientific and educational values, such as major ecosystems, rare plant and animal communities, and geological phenomena. About 75 percent of these values are presently estimated to be under some form of protection either within wilderness areas, wild and scenic river areas, endangered species habitats, or protected natural areas.

BLM is participating in several major natural history projects. One, "Man and the Biosphere," is sponsored by the United Nations Educational, Scientific, and Cultural Organization. Its objective is to develop an international network of protected areas that are representative of the earth's biologic regions. Another is the Research Natural Area Program which was instituted by the 18-member Federal Committee on Ecological Resources. BLM has participated in this program since the late 1940's. Under the program, natural areas identified as having dominant scientific and educational values are officially designated as Research National Areas and preserved.

Additional efforts are also being pursued to coordinate the natural history function with the Marine and Estuarine Sanctuaries Programs of the Office of Coastal Zone Management, the Rare and Endangered Species Program, and other wildlife programs.

BLM manages the largest remaining cultural (including archeological and historical) resource base on Federal lands. Estimates of cultural resource sites and properties located on BLM-administered lands range from one-half million to over five million. These areas include a wide variety of sites ranging from southwestern prehistoric ruins to historic ghost towns; from aboriginal rock art to early wagon roads and trails; and from small scatters of ancient stone tools to abandoned military posts. These sites range from 20,000-year-old remains of special importance to the scientific community to areas of contemporary religious and social significance valued by many Native Americans.

Ninety cultural resource properties located on the public lands are listed on the National Register of Historic Places. Approximately 80 additional National Register nominations for cultural resource properties on public lands are pending or in preparation. Additionally, more than 500 cultural resource properties on the public lands have been identified as possessing qualities making them suitable for nomination to the National Register. This number is increasing at a rate of 200 to 500 properties per year.

The visual resource function in BLM consists of managing the quality of the visual environment on an equal basis with other resources and reducing the visual impact of development activities. BLM's visual resource function was established in 1975 and has two parts: The primary program includes the inventory and evaluation of visual resources, research, training, and program monitoring. The support program includes applying appropriate design standards for various projects, such as mining activities, powerlines, power plants, range projects, timber harvesting, roads, and recreation development in order to keep adverse visual impacts to a minimum. BLM also addresses visual concerns in environmental assessments, land-use planning decisions, and resource project implementation.

Progress Report

The Secretary of the Interior has designated 39 National Natural Landmarks--areas possessing exceptional value or quality for illustrating or interpreting the natural heritage of the Nation--on about 2.4 million acres. BLM also has recognized 30 Research Natural Areas--areas having natural features worthy of preservation for research and educational features--on 110,000 acres. As many as 100 other natural areas (including Outstanding Natural Areas and Primitive Areas), covering almost one million acres, have also been recognized. At least three million acres of additional protection areas have been identified.

To provide leadership for the natural history program and ensure coordination with HCRS and others, a permanent program manager was hired in the Washington Office in fiscal year 1979. Regulations (43 CFR 8200) covering the natural history program became effective on October 12, 1978.

Inventories of cultural resources on about two-thirds of BLM-administered lands have been recorded. To facilitate this process, BLM and the Forest Service joined in a reciprocal effort to inventory resources that are on adjoining BLM and Forest Service lands. This effort allows both personnel and budgetary resource sharing.

In 1979, BLM implemented a process to evaluate all cultural resource sites for classification within several categories of use: socio-cultural use, current or potential scientific use, management use, and conservation for future use.

BLM has also taken steps to ensure the protection of several fragile cultural sites. In 1979, it posted signs and erected fences at seven sites and patrolled nine critical areas.

Visual resources inventories have been completed on approximately 15 percent of the public lands. The inventory is expected to be completed about 1985, with the assistance of 50 field professionals and two private contractors in Colorado and Utah.

BLM conducts an on-going training program to keep field staff informed about any changes or modifications to the visual program.

Current Issues

A key issue in the Natural History, Cultural, and Visual Program is the conflict between preserving the public lands legacy and using the land for other multiple uses, especially ones related to energy, livestock grazing, and wilderness. BLM depends upon its ongoing multiple use planning process to ensure that these values are carefully considered in resource use decisions.

Continued theft, destruction, and vandalism of BLM's cultural resources is another serious threat to the preservation of a vast number of invaluable, nonrenewable cultural sites. The recently passed Archeological Resources Protection Act of 1979, coupled with FLPMA, provides the needed enforcement authority to curtail these destructive activities. Because cultural artifacts have significant commercial value, the problem of theft is a major one and will require an adequately-funded law-enforcement and public-education effort to assure protection.

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Recreation and Environmental Areas
2. Field Administrators: State Directors and Director, Eastern States Office

B. Authorizing Legislation

Federal Land Policy and Management Act of 1976, P.L. 94-579, U.S.C. 1701, 1782; Bureau of Land Management Authorization of 1978; Antiquities Act of 1906, P.L. 59-209, 16 U.S.C. 432; National Environmental Policy Act of 1969, P.L. 91-190, 43 U.S.C. 4321, 4331-5; Historic Sites Act of 1935, 16 U.S.C. 461; National Historic Reservation Act of 1966, 16 U.S.C. 470; Archeological and Historic Preservation Act of 1974, 16 U.S.C. 469

C. Funding	1978	1979	1980
1. Authorization ($000°s)	N/A	2,400	2,400
2. Budget Authority ($000°s)	1,898	3,090	2,810

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Renewable Resources and Protection
3. Subactivity: Recreation Management
4. Component: Natural and Cultural Resource Management

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000°s)	2,486	3,090	3,104	2,810
2. Work Years	97	105	97	97

F. Performance

Work Units	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Inventory (million acres)	1.0	1.0	6.0	5.4
2. Site Protection (#)	54	54	50	50
3. Permits (#)	153	200	260	260

G. Evaluation (Completed)

None

Evaluations (Underway)

1. Organization: Bureau of Land Management
2. Title: Cultural Resources Management Program

1. Organization: Bureau of Land Management
2. Title: Grand Gulch Plateau Cultural Resource Management Area, Utah

1. Organization: General Accounting Office
2. Title: Federal Archeology Programs

Evaluations (Planned)

None

WILD HORSE AND BURRO MANAGEMENT

The Wild Free-Roaming Horse and Burro Act of 1971 directed the Secretaries of the Interior and Agriculture, through BLM and the Forest Service respectively, to protect and manage--in ecological balance with other resource values--all unbranded and unclaimed horses and burros on the public lands and national forest lands. It also established a maximum penalty of $2,000 and 1-year imprisonment for harassing, capturing, killing, or selling a wild horse or burro.

The 1971 Act was amended by FLPMA to allow the use of helicopters for rounding up the animals and motor vehicles for transporting them. The Public Rangelands Improvement Act of 1978 (PRIA) further amended the 1971 Act and substantially strengthened the program. PRIA required that the Secretaries maintain current inventories of wild horses and burros and determine optimum population levels. Animals in excess of these levels are to be removed for adoption or destruction. PRIA provides for the transfer of title to a maximum of four adopted animals after one year of humane care. In addition PRIA directed the Secretaries of the Interior and Agriculture, through BLM and the Forest Service, to contract with the National Academy of Sciences for a research program to provide critically-needed scientific information for improving wild horse and burro management.

Since its inception, wild horse and burro management has been a controversial program, highlighting the stark contrasts between the natural appeal of free-roaming animals and the destructive effect of overpopulation on fragile range ecosystems. At the center of this controversy are the fundamental questions of whether there are too many horses in some areas and, if so, how their population can best be controlled. BLM last inventoried wild horse and burro populations in 1978, when about 54,000 horses and 9,000 burros were estimated to be on public lands in 10 western States. Roughly 60 percent of the horses were in Nevada alone, and 80 percent of the burros were concentrated in Arizona and California. Obviously, these populations estimates have since increased by offspring from two breeding seasons and decreased by roundups concluded during 1978 and 1979.

To guide the management of wild horses and burros on the range, BLM develops herd management plans designed to place the animals' space, forage, and water requirements in balance with other range resource uses. Desirable population levels will be based on range suitability and historic use, climate, and topography. BLM will give special consideration to age, sex ratios, unique coloration, and other herd characteristics when developing such plans. At the end of fiscal year 1979, 25 of the proposed 125 management plans had been completed.

When excess wild horses or burros have to be removed, BLM develops a capture plan outlining the method, timing, and sequence of events from the beginning of capture to disposal of the animals. A veterinarian is present or available during the capture. The animals are then taken to the nearest BLM holding facility, where they are examined by a veterinarian, vaccinated for communicable diseases, and given any other required medical attention. During fiscal year 1979, BLM captured 5,867 wild horses and burros.

The principal mechanism in BLM for disposing of excess animals is the nationwide Adopt-A-Horse Program, which was started in the fall of 1974. Under the program, approved applicants can receive up to four animals per year. The animals are adopted from BLM's western holding facilities or from contract distribution centers in Eugene, Oregon; Valley Mills, Texas; Cross Plains, Tennessee; and Spanaway, Washington. Currently, the applicant pays a health fee ($10-20) covering vaccinaton and examination expenses and a handling and transportation fee ($80-140) for animals that have been sent to distribution centers. In all, BLM spends about $300-450 to capture and place each animal under adoption through the western holding facilities.

Since the start of the Adopt-A-Horse Program, over 5,000 individuals have adopted 14,329 horses and burros. Over one-third of the horses were adopted in fiscal year 1979, and 12,000 applications were pending at yearend.

Progress Report

A number of steps were taken last year to strengthen the Wild Horse and Burro Program in general and the adoption program in particular. BLM established a Division of Wild Horses and Burros in its Washington Office in June 1979 to improve coordination and leadership and serve as the advocate for wild horses and burros within BLM.

BLM also improved conditions at holding facilities in Burns, Oregon; Rock Springs, Wyoming; Susanville, California; and Reno, Nevada, to correct drainage problems, install new feeding bunkers, and establish and regulate corral capacities. Regular programs of maintenance and inspection have been established.

To facilitate the monitoring of captured government horses and burros, a program of freeze-marking was begun. The permanent freeze-mark symbol contains an individual registration number and identifies the State in which the animal was captured.

New distribution centers in Eugene, Oregon; Valley Mills, Texas; Cross Plains, Tennessee; and Spanaway, Washington, were established to bring excess horses and burros closer to sources of adoption demand. To help the adopter, a detailed handbook was published on the care and maintenance of wild horses and burros.

Regulations proposed in April and published in final form in December implement new wild horse and burro management requirements under PRIA. PRIA provides regulations implementing important improvements in the adoption program, including the establishment of criminal penalties for inhuman treatment, commercial exploitation, and other abuses of adopted animals. Moreover, the U.S. Attorney General's Office has agreed to expedite prosecution of animal exploitation or abuse of horses and burros. Nearly 70 individual cases of abuse have been reported in the adoption program since its inception. All have been or are being investigated and 10 were presented in fiscal year 1979 to U.S. Attorneys for prosecution. In addition, a cooperative agreement with the Utah Humane Society was developed to monitor the condition of horses and burros after adoption in that State. Pursuant to another provision of PRIA and in cooperation with the Department of Agriculture's Forest Service, a contract was begun with the National Academy of Sciences to develop a research program on wild horses and burros to establish appropriate population levels on the range, as well as to provide other scientific information.

Finally, at the close of the year, BLM began three new management initiatives. First, to improve the efficiency of adoption centers, standardize procedures, and ensure availability of eligible adoptors, a coordinated management system was developed, incorporating inventory, planning, removal, and adoption processes. Second, BLM has begun an information program to increase public appreciation of the value of wild horses and burros as a cultural and scenic resource and public awareness of the adoption program to ensure high adoption demand. Third, BLM has begun developing even more stringent procedures for screening applicants and monitoring adoptions.

Current Issues

For the Wild Horse and Burro Program, these are the four current and key issues: (1) support for implementing management plans (including round-up and distribution activities), (2) support for enforcement of regulations prohibiting inhumane treatment and commercial use of adopted horses, (3) support for investigations of theft, abuse, and harassment of free-roaming animals on public lands, and (4) support for completing the research recommended by the National Academy of Sciences.

Although the PRIA calls for destruction of old, sick, or lame animals and excess animals for which no adoption demand exists, present Secretarial policy is to place all healthy animals under adoption (sick or lame animals may be destroyed upon veterinarian's advice). As management plans are developed and more excess animals become available for adoption, it is reasonable to expect that the supply of older animals will exceed the demand and that some healthy animals may have to be destroyed.

In the coming months, BLM will begin addressing alternative methods for disposing of excess animals for which no adoption demand exists.

As a result of a recent court ruling, Roaring Springs Associates v. Andrus, BLM has to remove wild horses and burros from public rangelands where such lands are unfenced and interspersed with private holdings. I this case, plaintiffs were successful in having wild horses removed from their lands, based on a provision in the Wild Free-Roaming Horse and Burro Act requiring horses and burros to be removed upon request of a private land owner. Since most of the public land in the West is intermingled among private lands, such removal would eliminate herds in certain areas and would be expensive and time-consuming. The Administration has initiated a legislative proposal in this regard that would limit an agency's responsibility to situations where the private land is fenced and a written request is made for removal of the horses and burros.

An emerging issue is the advisability of establishing ranges or sanctuaries for wild horses and burros. These restricted areas would reduce trespass by the animals for rangeland resources and the danger of communicable livestock diseases being transmitted to or from the horses and burros.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Recreation and Environmental Areas

2. Field Administrators: State Directors and Director, Eastern States Office

B. Authorizing Legislation

Wild, Free-Roaming Horse and Burro Act of 1971, P.L. 92-195, 16 U.S.C. 1331-1340; Federal Land Policy and Management Act of 1976, P.L. 94-579, 16 U.S.C. 1338a; Public Rangelands Improvement Act of 1978, P.L. 95-514, 43 U.S.C. 1712; Bureau of Land Management Appropriation Authorizaton of 1978, P.L. 95-352, 43 U.S.C. 1748

C. Funding	1978	1979	1980
1. Authorization ($000's)	N/A	40,300*	35,000*
2. Budget Authority ($000's)	4,025	3,691	5,150

*No breakdown available; figures include Livestock Management. Additional authorization of $11,000,000 from P.L. 95-514, Public Rangelands Improvement Act, for range, soil, water, air, and wildlife in FY 1980.

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Renewable Resource and Protection
3. Subactivity: Rangeland Management
4. Component: Wild Horse and Burro Management

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	3,704	3,691	4,250	5,150
2. Work Years	109	108	96	96

F. Performance	1978 Actual	1979 Planned	1979 Actual	1980 Planned
Work Units				
Millions of acres inventoried	20.9	15.0	14.4	9.0
Number of holding facilities (corrals) maintained	9	9	9	9
Number of distribution centers in operation	2	4	4	4
Number of animals adopted	2,995	5,000	5,000	8,300
Number of herd management plans developed	12	11	11	14
Number of excess animals removed from public lands	6,802	7,000	6,071	8,500
Number of WH&B compliance checks after adoption	34	500	518	806

G. Evaluations (Completed)

1. Organization: Bureau of Land Management
2. Title and Date: Adopt-A-Horse Review, September 29, 1978
3. Major Findings: A review of selected adoptors of large numbers of animals in California, Oregon, Colorado, Minnesota, Missouri, and Oklahoma revealed that the animals inspected appeared to be in good condition. No indications of mistreatment or inhumane care were observed. In three instances, however, the inspecting team was unable to locate some animals or the adoptors. Law enforcement personnel are investigating these cases.

   Interviewers and research indicated that there are problems associated with the internal operation of the program. Lack of adequate staff and a low level of management attention have made operation of the program difficult in some States.

4. Subsequent Action: In fiscal year 1979, a Division of Wild Horses and Burros was established and staffed in the Washington Office to strengthen and provide leadership for the program. Also, more stringent requirements for qualifying as adoptors were established.

H. Evaluations (Underway)

None

I. Evaluations (Planned)

None

LANDS AND REALTY MANAGEMENT

LANDS AND REALTY MANAGEMENT

Certainly, FLPMA's most sweeping effect was the consolidation and clarification of the objectives and procedures by which the remaining unreserved public lands under BLM's jurisdiction would be managed. The public lands had been used throughout the 19th century as incentive stock to spur the development of the west, and the General Land Office, BLM's predecessor, had as its primary purpose the disposal of the public domain. Demand for the land dwindled by the turn of the century as what appeared to be the choicest parcels were transferred to State and private ownership or reserved for special Federal purposes. Through a series of evolutionary developments, however, the concept of disposal was modified and finally reversed during the last 50 years. The Taylor Grazing Act, the Classification and Multiple Use Act, the report of the congressionally established Public Land Law Review Commission, and other events—notably the increasing realization of the national value of the remaining public lands—led to the formal and final articulation as Federal policy, in FLPMA, that the public lands would, for the most part, be retained in Federal ownership and managed for the benefit of all Americans under the principles of multiple use and sustained yield.

While FLPMA establishes retention as the general policy, it also provides for disposal of land at fair market value through a variety of mechanisms where there is a demonstrated need or public purpose to be served and where the disposal action is generally consistent with BLM's plan for the area and clearly in the national interest. FLPMA clarified BLM's responsibilities with respect to land sales, exchanges of land, land acquisition, and the granting of rights-of-way for a variety of public purposes. It also called for a sweeping review of all lands previously withdrawn from general use.

Since the FLPMA was passed, BLM's Lands and Realty program has focused its attention on four areas of activity: (1) producing regulations implementing sale, exchange, and rights-of-way provisions of the act, (2) responding to dramatically increasing energy-related land transaction applications, (3) conducting an inventory of withdrawn lands prior to a study of which lands can be returned to multiple use, and (4) processing State and Native land selections under the Alaska Statehood Act and the Alaska Native Claims Settlement Act.

Progress Report

A long time in the making, proposed new regulations governing sales of public land were published by BLM on October 26, 1979. Following what is sure to be extensive public review, BLM expects to finalize the new regulations by June 1980. In the interim, sales of public lands have been held to provide for community expansion and urgently needed private land actions. Since the passage of FLPMA, BLM has held some 73 sales and sold 1,679.38 acres for various purposes. As examples:

- BLM has held three sales in the Las Vegas area during the last year to facilitate growth. Approximately 490 acres were sold for over $11.5 million and a remaining 250 acres in small parcels are being offered on a monthly basis. Each sale has been held with the close cooperation of the city and county in order to ensure that sales keep pace with and do not exceed planned development goals.

- Similar sales have been held to promote expansion in Rock Springs, Wyoming, and Tonopah, Nevada.

- BLM sold a narrow strip of public land in a residential section of Lead, South Dakota, clearing title to many families' homes.

BLM also published pre-proposed rules governing land exchanges under FLPMA at the close of the calendar year. Final regulations are expected in the fall of 1980. The opportunities for exchanging land to simplify ownership patterns or to serve a variety of public or private purposes have long been hampered by the requirement that the parcels exchanged have equal value. A key provision in the new regulations implements language in FLPMA providing for either party in an exchange to pay up to 25 percent of the value of the lands involved in cash in order to equalize land values. Special emphasis was given to exchanges with States through a Memorandum of Understanding executed with the Western States Land Commissioners in July 1979. Since FLPMA, BLM has completed 72 exchanges involving 85,045.36 acres (including offered and selected lands) using pre-FLPMA exchange regulations as modified by the requirements of FLPMA.

On January 4, 1979, regulations were issued governing procedures for handling conveyances of mineral interests under Section 209 of FLPMA. Subsequently, on September 17, 1979, BLM issued the internal operation procedures for handling such conveyances through Organic Act Directive (OAD) 79-53. There has been considerable interest in such conveyances, but because of the high administrative costs involved in determining mineral estate values, there may be fewer actual transfers than anticipated.

New rules to implement Title V of FLPMA dealing with rights-of-way were published in proposed form on October 9, 1979. These regulations call for considerable pre-application consultation between prospective applicants and BLM field offices. Also being provided is the authority for BLM field (district) offices to issue right-of-way grants, rather than limiting that authority to BLM State offices. It is anticipated that this should reduce grant processing time.

A substantial proportion of Lands and Realty Program effort in recent years has been devoted to processing siting and rights-of-way proposals associated with the dramatic increase in domestic energy development and facility construction in the West, the vast majority of it on public land managed by BLM. As of the end of the 1979 calendar year, BLM was processing applications and either conducting or participating in environmental analyses of:

- ten major pipeline projects, from the 195-mile Colony Oil Shale Pipeline to the 4,000-mile Alaska Natural Gas Pipeline;
- eight major powerplant siting proposals, from a 500 megawatt project in Nevada to the 3,000 megawatt Intermountain Power Project in Utah;
- 15 major transmission line proposals, from a 40-mile line from Ojo to Taos, New Mexico to an 850-mile line through Utah, Nevada, and California; as well as
- a variety of railroad, highway, water system, and tunnel projects.

To provide a visible focal point for facility siting projects of exceptionally high national importance, BLM created in fiscal year 1979 an Office of Special Projects in Washington and a companion Special Projects Environmental Assessment Team in Denver. The new Office is responsible for tracking the development of selected projects, monitoring and expediting siting and environmental analysis, and serving as the broker between the project developer and the Department of the Interior, other Federal agencies, State and local governments, and various interest groups. Projects currently managed by the Office of Special Projects include the West-to-East Crude Oil System, the ETSI (Energy Transportation Systems Inc.) Coal Slurry Pipeline, the Alaska Natural Gas Transportation System, the MX Missile System, and the Bisti powerplant complex in New Mexico.

Also completed in fiscal year 1979 was an inventory report on longstanding withdrawals of public lands. Section 204 of FLPMA required a comprehensive 15-year review of past withdrawals of public lands and authorized a total of $10 million for the program. The inventory report identifies some 67.9 million acres of land to be covered by the review. Because of the special interest in the potentially petroleum-rich Overthrust Belt area in Idaho, Wyoming, Montana, and Utah, BLM has scheduled accelerated review in this area to be completed by the end of fiscal 1980. BLM intends to complete the withdrawal review on the rest of the public lands before the 1991 deadline and is developing a schedule for that purpose.

Nearly a quarter of BLM's lands and realty workforce is involved in processing Native and State selections in Alaska under the Alaska Native Claims Settlement Act and the Alaska Statehood Act. As of the close of fiscal 1979 BLM conveyed 10.6 million acres of a total of some 44 million acres due the Alaska Native villages and Native Regional Corporations and 37 million acres of a total 104 million acres due the State. The current objective is to convey about 6.6 million acres annually to the Natives and between 13 and 14 million acres annually to the State of Alaska.

Current Issues

The Indemnity Selections program was enacted to provide States with lands in lieu of those which would have been granted upon statehood had they not been preempted by other valid claims or set aside for some Federal purpose. Land transfers under this authority have been limited over the past few years because of litigation entered by the State of Utah over the discretionary authority of the Secretary of the Interior, under Section 7 of the Taylor Grazing Act, to classify lands as to their suitability for such transfer.

The District Court's decision that the Secretary does not have such discretionary authority was affirmed by the Tenth Circuit Court of Appeals on August 8, 1978. This decision was appealed to the Supreme Court by the Department of Justice, and the Supreme Court has agreed to hear the case this term.

If the Supreme Court upholds the earlier Appeals Court decision it can be anticipated that States with remaining entitlement can be expected to seek high-value lands.

The two remaining authorities to make grants of land for agricultural purposes are the Desert Land Act and the Carey Act. The Homestead Act too is still in force until 1986 in Alaska but was repealed by FLMPA for the Lower 48. Because of the large acreages being transferred to the State and Natives or set aside for Federal programs in Alaska, a Federal Homestead program there is not anticipated.

Activity under the Desert Land Act statute is occurring principally in the States of Nevada and Idaho. At the State's request, Nevada was opened to the filing of agricultural entry applications in January 1979. Some 3,397 applications covering some one million acres have been filed since that date, creating a large backlog of applications. A recent agricultural study of public lands in Nevada determined that there are only about 50,000 acres in the State suitable for such development. It can, therefore, be anticipated that there will be many unhappy applicants.

The Desert Land Act application situation in Idaho is similar. Roughly 1,400 applications are on file. A recently issued draft Environmental Statement on the impact of agricultural development of an area in south central Idaho disclosed that great increases in irrigation-related power development and costs will result from opening such areas to agricultural development.

The 1894 Carey Act provides for the transfer of lands to States for further transfer to private individuals in up to 160-acre tracts for agricultural development. As with the Desert Land Act, the limiting factor is water availability. Today, virtually all of the Carey Act entitlements to States—ranging from one million to three million acres—remain unclaimed. Nevertheless, Idaho has challenged the Secretary of the Interior's discretionary authority to approve grants under this statute. The matter is now in the courts, and the Supreme Court has agreed to hear the case this term. The Department had developed regulations to reimplement this authority, but because these regulations cite the discretion of the Secretary to make Carey Act grants they have not been issued pending resolution of the litigation.

BLM will play a central role in the MX missile project, should the Administration continue to pursue its deployment. The Air Force plans to site the MX missile system on public lands in both Nevada and Utah, and the Bureau sees its responsibility as having a concern for the resources of the lands involved. The Bureau has met regularly with the Air Force since the close of the fiscal year to outline the analytic requirements of FLPMA and NEPA and will serve as an official "cooperator" in the EIS scoping and preparation process. A draft EIS is scheduled for June 1980. The Bureau has an interest in ensuring that the needs of existing users of the land are considered and that the potential impacts of the project are analyzed before siting decisions are made.

The Bureau plays a similar role in the issue of siting nuclear waste repositories on the public lands. The President's Interagency Review Group on nuclear disposal recommended that the Federal government pursue a comprehensive examination and characterization of alternative sites and alternative disposal media before making final decisions about the disposal of either existing Defense nuclear wastes or existing and future commercial nuclear wastes. The President is expected to issue instructions in this regard shortly. The Bureau concurs with this approach and with the principle that the States should be full participants in any siting decisions. With respect to the Waste Isolation Pilot Project (WIPP) proposed near Carlsbad, New Mexico by the Department of Energy, the Bureau understands that the President is likely to approve continuation of research and development work at the site but not to construct either an interim or permanent waste repository at this time. As with MX, BLM's responsibility is to ensure that the impacts of such a proposal on the resources and interests involved are professionally and carefully analyzed.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Lands and Rights-of-Way
2. Field Administrators: State Directors

B. Authorizing Legislation:

Federal Land Policy and Management Act, P.L. 94-579, 43 U.S.C. 1711 et seq. especially 1713-1716, 1721-1722, 1732, 1744, 1761-1771; Mineral Leasing Act of 1920, P.L. 66-146, 30 U.S.C. 185; Taylor Grazing Act, P.L. 73-482, 43 U.S.C. 315; Alaska Native Claims Settlement Act, 43 U.S.C. 1616; Recreation and Public Purposes Act of 1926, 43 U.S.C. 869; Carey Act of 1949 as amended, 43 U.S.C. 687b; Wild and Scenic Rivers Act, 16 U.S.C. 1277; Act of August 18, 1894, Section 4; National Environmental Policy Act of 1969, P.L. 91-190, 43 U.S.C. 4321, 4331-4335, and 4341-4347; King Range Act of 1970, P.L. 91-476, 16 U.S.C. 4601; Conservation of Timber Act of 1937, P.L. 75-405, 43 U.S.C. 1181; Mining Claim Rights Restoration Act of 1955, P.L. 86-507, 30 U.S.C. 621; Federal Aid Highway Act of 1966, 43 U.S.C. 932

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	32,900	33,900
2. Budget Authority ($000's)	25,048	31,932	30,000

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Lands and Realty Management
3. Subactivity: Lands and Realty Operations

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	27,696	31,932	29,785	30,000
2. Work Years	2,084	2,000	1,070	1,070

Service Charges, Deposits and Forfeitures

C. Funding	1978	1979	1980
1. Authorization	N/A	N/A	N/A
2. Budget Authority ($000's)	9,975	5,664	13,750

D. Appropriation Structure

1. Title: Service Charges, Deposits and Forfeitures

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	8,227	13,750	6,648	13,750
2. Work Years	113	120	115	120

F. Performance

N/A

Energy Related Realty

C. Funding	1978	1979	1980
1. Authorization	Figures not broken down by component		
2. Budget Authority	9,188	11,308	10,800

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Lands and Realty Management
3. Subactivity: Lands and Realty Operations
4. Component: Energy Related Realty

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	9,100	11,308	5,311	10,800
2. Work Years	168	230	173	230

F. Performance

Work Units

1. Environmental Analyses	1,245	1,482	1,374	1,391
2. Environmental Statements	1	2	—	2
3. Field Examinations	4,098	2,794	2,186	4,830
4. Use Authorizations	1,452	1,430	1,723	1,834
5. Compliances	4,238	3,727	3,484	2,162

Non-Energy Related Realty

C. Funding

	1978	1979	1980
1. Authorization	Figures not broken out		
2. Budget Authority ($000's)	15,860	20,624	19,200

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Lands and Realty Management
3. Subactivity: Lands and Realty Operations
4. Component: Non-Energy Related Realty

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	18,596	20,624	24,474	19,200
2. Work Years	766	720	730	720

F. Performance

Work Units

1. Field Examinations	3,702	4,655	5,376	4,830
2. Title Transfers	2,037	1,737	1,796	1,788
3. Use Authorizations	2,262	1,921	2,744	1,834
4. Compliances	2,568	2,555	2,715	2,162
5. Inventory (Acres)	822,435	14,750,794	15,544,120	14,249,120

Withdrawal Processing and Review

C. Funding	1978	1979	1980
1. Authorization ($000's)	—	3,000	3,200
2. Budget Authority ($000's)	1,177	2,005	3,100

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Lands and Realty Management
3. Subactivity: Lands and Realty Operations
4. Component: Withdrawal Processing and Review

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	852	2,005	2,135	3,100
2. Work Years	48	110	89	160

F. Performance

Work Units

1. Environmental Analyses	26	102	45	99
2. Special Designations	251	680	813	1,040

Mining Claim Recordation[1]

C. Funding

	1978	1979	1980
1. Authorization	N/A	N/A	N/A
2. Budget Authority			

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Lands and Realty Management
3. Subactivity: Lands and Realty Operations
4. Component: Mining Claim Recordation

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	---	N/A	2,188	N/A
2. Work Years	---	166	166	170

F. Performance

Work Units

Filings (Case)	603,900	517,255	486,300

G. Evaluations (Completed)

1. Organization: Interior Department, Office of Inspector General
2. Title and Date: Recovery of Costs Incurred by the Bureau of Land Management in Processing Rights-of-Way Across Federal Lands, November 1978
3. Major Findings: The report identified several problems in accounting for and collecting amounts due from right-of-way applicants including (1) inadequate accounting controls to capture and bill all costs properly reimbursable, (2) inappropriate indirect costs allocated to the work, and (3) no effective procedures to insure timely payments or assess interest penalties on overdue amounts.
4. Subsequent Action: BLM took action to implement recommended improvements in cost recovery procedures. New procedural regulations were published in proposed form on October 9, 1979.

1. Organization: General Accounting Office
2. Title and Date: Land Title Should Be Conveyed to Alaska Natives Faster, June 1978

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[1] See narrative on Non-Energy Minerals.

3. Major Findings: Six years after passage of the Alask Native Claims Settlement Act, the report identified an urgent need to accelerate land title transfer to Alaska Native corporations so they can develop the lands' natural resources to generate income. The report made several recommendations to prevent further delays.

4. Subsequent Action: BLM has increased the rate of land transfer to Natives.

H. Evaluations (Underway and Planned)

None

SUPPORT SERVICES

FIRE MANAGEMENT

The Fire Management Program shares with the rest of BLM the broad purpose of protecting and enhancing the resources of the public lands in order to preserve their capability to contribute toward meeting the resource needs of the Nation. More specifically, the Fire Management Program is responsible for:

- Protecting property and natural resource values on the public lands from wildfire
- Cooperating with BLM resource staff in the use of controlled fire to achieve resource management objectives
- Cooperating with resource staff in the rehabilitation of areas damaged by wildfire
- Hiring and training a work force, procuring equipment and supplies, and administering contracts needed to accomplish these tasks.

BLM is responsible for protecting 402,030,000 acres of land from fire damage, including land administered by other Federal agencies and some State and private land. It contracts with other Federal, State, and private agencies to protect 5,911,000 acres and directly protects 396,119,000 acres. About 218,000,000 of these acres are in Alaska.

BLM provides firefighting equipment and manpower to the Forest Service, National Park Service, Bureau of Indian Affairs, Fish and Wildlife Service, State foresters, and some private landowners. Cooperative Agreements provide for BLM to be compensated either financially or with firefighting assistance on BLM lands.

The Boise Interagency Fire Center (BIFC) in Idaho serves as BLM's center for maintaining and mobilizing interagency firefighting resources. BIFC also houses a training school for firefighters from all parts of the country, a communications monitoring and weather command station, and a center for equipment development and research. The BIFC is called upon when fires get beyond the control of local BLM, Forest Service, Bureau of Indian Affairs, Fish and Wildlife Service, or National Park Service officials--generally the kind of "disaster" fires which receive attention in the national media.

Annual damage to timber, watersheds, recreation, range, wildlife habitats, property, and other resources over the 10-year period from 1966 through 1975 averaged roughly $17 million and burned about 1.3 million acres per year. Frequency, scope, and damage caused by wildfires are determined by annual weather conditions and fuel buildup from year to year. For example, in 1969--a severe drought year in Alaska--fires on 4,271,000 acres caused an estimated $61 million in damage, while in 1975 fires damaged only 152,000 acres for a loss of slightly under $16 million.

Recent trends show an increase in the number of fires and a decrease in the acreage burned, for two reasons. First, increased use of public lands has raised the incidence of fire, although fire prevention programs have kept the rate of this increase lower than the rate of increased use. Second, in 1972, BLM modified its priorities from combating large "disaster" fires to improving its initial attack capabilities and early fire-detection systems. Consequently, wildfires are now brought under control sooner and the acreage burned is less than in the past.

Progress Report

BLM's plans for carrying out its firefighting responsibilities are contained in Normal Fire Year Plans developed for each BLM District. Descriptions of resource values, soil erosion potential, fuel types, topography, risks and hazards, and water supply in the areas to be protected are combined with information on transportation, aircraft and communication facilities, contracts and cooperative agreements covering the area, and current fire control capabilities to produce plans tailored to each potential fire area. In 1979, after 2 years of effort, the previous comprehensive Normal Fire Year Plan was completely updated.

Firefighting preparation also involves monitoring technological development and keeping firefighting capabilities up to date. In the late 1960's the use of helicopters and large retardant bombers revolutionized firefighting. Since then, technological advance has been rapid. The world's only "Dragon Wagon"--an off-road vehicle which transports water and fire retardant over formerly impassable terrain--belongs to BLM. In 1979, a congressional add-on permitted the purchase of 80 new trucks and pumpers as well as critical communication equipment. BLM is currently evaluating a ground tanker system with cost-cutting potential which actually "expands" water into foam through a compressed air system and a foaming agent.

Another important technological innovation, developed at BLM's Denver Service Center in the early 1970's, is the Automatic Lightning Detection System (ALDS). Lightning strikes in low-humidity areas are a major cause of wildfire. Traditional manned look-out towers were a costly method of early fire detection. Now detection devices in BLM field offices indicate lightning strike locations. In 1979 ALDS was expanded to cover virtually all of the 11 western States and Alaska.

As techniques for controlling fire have improved, BLM has increasingly used controlled burning to protect against wildfires by clearing volatile timber slash and creating fire breaks. Controlled burning is also employed in projects like brush clearing on rangelands. At the same time, controlled burning can cause air quality problems in some areas. The Bureau is studying the extent of this problem, and in the meantime BLM District Offices prepare environmental assessments on all prescribed burning projects.

Finally, pursuant to FLPMA, new regulations on fire management have been drafted and will be released for public review this fall.

Issues

Controlled fire is a new tool in BLM's stock of resource management techniques. Only recently have fire-control know-how and technology reached a level where a fire can be set with confidence. Resource managers have long known the benefit of fire as a natural part of the ecosystem. It is a cost-effective way of controlling the growth of brush on rangelands, limiting competition from undesirable plantlife, improving wildlife habitats, and limiting the build-up of flammable debris. However, until recently the risk of a fire spreading out of control was prohibitive.

BLM has been studying the effects of fire on various ecosystems and last year prepared a handbook of guidelines for the use of controlled fire. Test fires were set according to these guidelines and studied to evaluate the handbook's accuracy and usefulness.

Although technical problems remain, public awareness is now a major difficulty. Over the years, BLM has successfully cooperated with the Forest Service, which administers the Smokey Bear program, to educate the public to the hazards and tragedies which accompany wildfires. BLM must now communicate the distinction between fires that are carefully planned and controlled and unplanned wildfire, without undermining public concern for fire safety.

Budget and Performance Analysis (Fire Management)

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Technical Services

2. Field Administrators: State Directors and District Managers

B. Authorizing Legislation

Federal Land Policy and Management Act, P.L. 94-579, 43 U.S.C. 1732; Timber Protection Act of 1922, P.L. 67-315, 16 U.S.C. 594; Reciprocal Fire Protection Agreement Act of 1955, 43 U.S.C. 1856 a-d; Bureau of Land Management Appropriation Authorization of 1978, P.L. 94-352, 43 U.S.C. 1748

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	12,300	15,600
2. Budget Authority ($000's)	8,610	12,745	8,710

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Renewable Resources
3. Subactivity: Fire Management

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	8,864	12,745	10,637	8,710
2. Work Years	208	235	229	220

F. Performance

1. Activity Plans (number)	7	8	11	14
2. Hazard Reduction (number)	3	61	501	45

Firefighting and Rehabilitation

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	As Needed	As Needed
2. Budget Authority ($000's)	57,750	49,600	4,750

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Firefighting and Rehabilitation

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	62,550	4,750	54,570	4,750
2. Work Years	1,104	—	1,339	--

F. Performance

1. Number of Fires	2,334	N/A	2,312	N/A
2. Acres burned	71,134	N/A	475,279	N/A

G. Evaluations and Audits (Completed)

1. Organization: Bureau of Land Management, Washington Office
2. Title and Date: Interagency and Regional Fire Operations Evaluation, June 30, 1978
3. Major Findings: The evaluation examined the effectiveness of the Interagency and regional concept in firefighting operations and its impact on wildfire programs in the western States excluding Alaska, focusing on the Boise Interagency Fire Center, the Susanville Interagency Dispatch Center, and Western Slope Fire Operations in Grand Junction, Colorado.

   The report praised the interagency cooperation practiced at the first two locations and found that they supported wildfire programs effectively. At the same time, the report urged that steps be taken toward further interagency cooperation, especially in planning, staffing, and equipment deployment. The report also found that the Western Slope Fire Center was not performing its intended functions—to centralize and coordinate the use of expensive aircraft—due in large part to a lack of delegated authority to do so.

   The report also recommended steps to improve aircraft management in BLM.

4. Subsequent Action: Necessary authority was delegated to the Western Slope office and to State Fire Management Officers as recommended.

H. Evaluations (Underway)

1. Organization: Bureau of Land Management, Washington Office
2. Title or Subject: Boise Interagency Fire Center

I. Evaluations (Planned)

None

DATA MANAGEMENT

FLPMA gave BLM a strong legislative mandate for comprehensive land-use planning, a mandate that was further underscored by the Public Rangelands Improvement Act in 1978. In fact, BLM had been developing such a planning system since the 1960's. To comply with the mandate and in response to a rapidly growing need for analysis of large amounts of data, BLM is in the process of expanding its automated capability for gathering, storing, processing, and retrieving resource and other information.

BLM initiated a study in 1974 to determine its data management requirements for resource and administrative programs. The result of this study, known as the "Strategic Plan for Information Systems Management," is the principal BLM guide for developing data systems and calls for a 7- to 12-year effort to improve data storage, manipulation, and analysis. Specific goals of the plan are:

- to make information more timely, more readily available, and more useable through automation;
- to reduce the amount of space required to store records and the possibility of lost records;
- to raise the accuracy of data, especially statistics; and
- to reduce the staff hours required to gather, interpret, and store surface resource information, track vegetative trends, and check on land uses (authorized and unauthorized) through the use of satellite and computer-assisted remote sensing.

When the plan is fully implemented, BLM's data management capabilities will include a series of data banks to replace many existing voluminous files; access to data by headquarters and field offices; remote entry, update, and retrieval of data; availability of textual, numeric, and graphic material in the format desired by the user; identification of conflicts in management resource plans; projections of land uses and yields; word processing; and production of yearend and other periodic reports.

The computer systems being developed will support one or more functions related to management of lands, range, forestry, watershed, wildlife, recreation, minerals, cadastral survey, fire protection, roads and trails,

access transportation and rights-of-way, personnel, property, and financial management. Under the concept advocated by the Commission on Federal Paperwork and being implemented by BLM, all information storage, manipulation, and retrieval capabilities are managed as an integrated set of activities.

Progress Report

BLM has implemented the Mining Claim Recordation System on its Honeywell on-line computer that can be accessed by field offices continuously during working hours. The recordation system is the first on-line system to be run on the Honeywell computer, which was acquired in fiscal year 1978.

Other related actions in fiscal year 1979 include the development and successful testing of a system for managing soil and vegetation inventory information for resource planning. The development of the inventory techniques is being conducted under a reciprocal agreement with the U.S. Geological Survey (USGS), the Soil Conservation Service, the Forest Service, and the Fish and Wildlife Service. BLM also performed preliminary design work for the land and survey record system in cooperation with the Forest Service. The Fish and Wildlife Service, USGS, and BLM are nearing completion of a 3-year test of remote sensing technology and equipment for gathering information on wildland vegetation in cooperation with the National Aeronautics and Space Administration.

BLM's computer headquarters—the Denver Service Center—was reorganized in fiscal year 1979 to delineate distinct responsibilities. The functions of system development, computer technology, computer processing, and records management were separated into four specialized offices in an effort to facilitate data management operations. Several other steps were taken in this regard:

- Obsolete equipment at the Center was replaced with a 66/80 Honeywell computer.
- A basic telecommunication network was completed to connect the Washington Office and all State offices with the Center's computer.
- Equipment was acquired to analyze, correct, and enhance information gathered by satellite.

Current Issues

BLM is about 2 years behind the 1985 schedule for implementing the Strategic Plan. This delay was caused by the priority needs of several key programs:

- the soil and inventory (SVIM) data requirements of the court-ordered grazing EIS program;
- the mining claim recordation workload required by FLPMA, eased in part through a contract with Honeywell;
- the data processing requirements of the four-year authorization.

In addition, the strategic plan did not anticipate the extent of detail required in developing many key systems.

Budget and Performance Analysis

A. Administrative Responsibility

a. Program Administrator: Deputy Director for Services
b. Field Administrators: State Directors and Director, Eastern STates Office

B. Authorization Legislation

Federal Land Policy and Management Act of 1976, P.L. 94-579, 43 U.S.C. 1711, 1731, 1732, 1781; Bureau of Land Management Appropriation Authorization of 1978, P.L. 94-352, 43 U.S.C. 1748

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	16,600	19,000
2. Budget Authority ($000's)	12,874	16,535	14,990

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Planning and Data Management
3. Subactivity: Data Management

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	11,043	16,535	11,010	14,990
2. Work Years	235	280	253	280

F. Performance

N/A

G. Evaluations (Completed)

1. Organization: Office of Inspector General (OIG), Department of the Interior
2. Title and Date: Review of the Bureau of Land Management's Mining Claim Recordation System Data Entry and Retrieval Procedures, November 28, 1979.
3. Major Findings: OIG found a significant number of discrepancies between the spelling of claimants' names filed in the computer and the coded source documents in the mining claim case file. The number of records containing discrepancies ranged from 69 to 86 percent in samples in the computer for three States. No errors were found on the "critical" elements such as serial number.

   OIG also found that access to the data in the computer was virtually uncontrolled although user numbers, passwords, or special authorization codes were available and their use was not enforced. It also found that mining claim documents filed by claimants at the State offices are inadequately controlled against loss or theft.

4. Subsequent Action: The Denver Service center has recommended to the Washington Office that a Mining Claim Workshop be held in the spring, 1980, to cover issues raised in the evaluation. Also edit programs have been developed to prevent a majority of the errors from recurring and an error listing will be provided to offices entering data for purposes of making corrections. Instructions have been issued to State offices to exercise greater control over the use of passwords and access and security procedures.

H. Evaluations (Underway)

1. Organization: OIG, Department of the Interior
2. Title: Review of ADP Operations in the BLM Denver Service Center

I. Evaluations (Planned)

None

CADASTRAL SURVEY

A cadastral survey marks and defines the legal boundaries of a tract of public land by establishing monuments, or corner marks, on the ground and recording their location in field notes and plats. Upon official approval, these documents become a permanent part of the Public Lands Survey System (PLSS). As such, they serve as the basis for patents and other documents used for conveyance when public lands pass out of Federal ownership and for overall administration and management of lands retained in Federal ownership. Also included in the PLSS are Federal boundaries on the Outer Continental Shelf.

The United States Cadastral Survey Program is as old as the Nation itself. BLM's cadastral survey authority traces back to the Ordinance of May 20, 1785. Passed by the Continental Congress to facilitate orderly settlement of western lands by ensuring marked boundaries and recorded titles, the Ordinance made the survey of public land a prerequisite to settlement and established a rectangular system of survey. Under this system, land is divided into six-mile-square townships, each township containing 36 one-mile-square sections. The first township was surveyed in Ohio in 1786.

Cadastral surveys acquired a quasi-judicial status in 1805 when Congress legislated that real property derived from the public domain by patent should have the protection of immutable boundaries and fixed acreages (43 U.S.C. 752). Cadastral surveys define those boundaries and become a part of the patent.

The earliest surveys were administered by the Office of the Geographer in the Department of the Treasury, an appropriate home when land sales were a major source of national revenue. The cadastral survey program remained in the Treasury Department--becoming part of the General Land Office (GLO) in 1812--until the GLO was transferred to the newly formed Department of the Interior in 1849. When the GLO merged with the Grazing Service in 1946 to become the Bureau of Land Management, BLM acquired responsibility for the administration and execution of cadastral surveys on all public lands.

Legally defensible boundaries are essential for identification of ownership so that the classification, management, and wise use of the public lands can proceed. They are needed to define management and use areas, to dispose of resources without infringing on non-Federal property, and to prevent trespass or the illegal use of Federal land, minerals, and resources. Legal property descriptions are required for public land transfers, energy development, easement acquisition, timber sales, and grants of right-of-way, and these transactions depend upon timely cadastral surveys.

As the Bureau has changed from a land disposal to a land management agency, the traditional task of defining land tracts for sale or transfer has changed as well. While the job of conducting rectangular surveys remains, Cadastral Survey also resurveys areas where markers have disappeared or where an original survey is questionable and surveys to define areas for special protection and management.

Progress Report

The responsibilities of the Cadastral Survey Program have grown steadily since 1959, when the State of Alaska, with less than 2 percent of its acreage surveyed, was added to the public domain. Other land management agencies for whom BLM performs cadastral surveys have also been increasing their efforts to define the boundaries of their lands in order to manage them effectively.

Original survey work remains a major program element in Alaska, where 90 percent of all original-survey work is now performed. The Alaska Statehood Act of 1958 required the transfer of 104 million acres of Federal lands to the State within 25 years. The task of surveying those lands was compounded by the Alaska Native Claims Settlement Act of 1971 (ANCSA), which provided for a grant of 40 million acres of Federal land to the State's Eskimos, Indians, and Aleuts, as well as for the designation of additional acreage as national parks, wildlife refuges, national forests, and wild and scenic river areas. Before title to any of this land can be transferred to Natives or to State and Federal agencies, boundaries must be surveyed, private rights identified, and municipal boundaries and specialized sites defined.

Including other legislative survey requirements,* BLM has completed roughly 65 million or 44 percent of the 149 million acres of survey work in Alaska required under the Alaska Statehood Act and the Alaska Native Claims Settlement Act prior to land transfers to the State and to Native groups. This does not include the additional millions of acres of boundary surveys for national parks, forests, wildlife refuges, and wild and scenic rivers which will be necessary when Congress acts to identify them. Other complex survey tasks for the future include the identification of mining claims, offshore surveying to establish the statutory three-mile limit necessary for defining oil and gas rights, and the survey of lakes and rivers to establish riparian rights. Total unsurveyed acreage in Alaska is estimated at over 300 million acres.

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* 1906 Native Allotment Act, 1926 Townsite Act, 1898 Homestead and Trade and Manufacturing Sites Act, and the 1927 Homesites and Headquarters Act.

The magnitude of survey needs in Alaska spurred BLM to find new survey technologies. One such device is the Auto-Surveyor, an inertial guidance system which can identify exactly an in-flight aircraft's longitude-and-latitude position. Placed aboard a helicopter, the system enables surveyors to identify quickly approximate corner locations which can then be marked precisely by ground crews. Another tactic to increase BLM's survey capabilities has been the extensive use of contractors to perform largescale area surveys in Alaska.

New survey technologies and contract surveys are less useful in the Lower 48 States, where original survey work is about 80 percent complete. Original surveys are now undertaken only when there is a specific need for establishing boundaries, for example, when unsurveyed public land is being made available for State, local, or private purposes. About 85 percent of the cadastral surveys in the contiguous United States are performed to support resource management programs rather than for land conveyances. For the most part, this involves the "maintenance" work of resurveying--correcting fraudulent or grossly erroneous surveys and locating deteriorated markers by reconstructing written and physical evidence. Resurveying in the Lower 48 States is also planned to accommodate programmatic priorities, such as defining forest boundaries for timber harvests.

Much of Cadastral Survey's work in the Lower 48 States is performed on a reimbursable basis for other Federal agencies. BLM performs surveys for the U.S. Forest Service, Bureau of Indian Affairs, National Park Service, Bureau of Reclamation (now the Water and Power Resources Service), U.S. Fish and Wildlife Service, the Department of Defense, and occasionally the Department of Justice, in descending order of workload. The total projected survey needs of these agencies are not fully known, and survey requests are usually made on a year-to-year basis.

Of these agencies, the Forest Service, which manages almost 188 million acres of forest land, has by far the greatest survey needs. In 1958, it began a serious boundary survey program of its own, and since fiscal 1970 the Forest Service survey program has grown at almost twice the rate of BLM's Cadastral Survey Program. Unless approved by BLM, Forest Service surveys do not carry the full weight of Federal law and do not become part of the public land records system. BLM is currently investigating the possible efficiencies of delegating the field work portion of a cadastral survey to the Forest Service in conformance with the Manual of Surveying Instructions of 1973. The surveys could then be officially approved by BLM.

Current Issues

Both internal and external audits, program evaluations, and other investigations undertaken over the last decade have identified staffing, funding, interagency coordination, workload, planning, and organizational problems in the Cadastral Survey Program. In July 1978, the House Appropriations Committee requested an investigation of the cadastral survey programs of the Department of the Interior and the U.S. Forest Service. The report issued by the Survey and Investigations Staff on February 6, 1979, both

recognized the importance of the Cadastral Survey Program to all Federal resource management programs and found that "the BLM program has been inadequate in meeting the needs of resource program managers, not only in BLM, but in other agencies," and that "BLM will never be able to respond satisfactorily to the survey needs of other agencies unless the Cadastral Survey Program in the Lower 48, particularly the portion of it addressing the needs of other agencies, is given higher priority." In its interim response to the congressional report, BLM replied, "The problem is not one of assigning high priority. The problem is the basic where-with-all to meet those high priority needs."

The increasing cadastral survey problem has two dimensions. First, manpower and funding for the Bureau are simply inadequate to meet the growing government-wide requirements for cadastral surveys. Over the years, this has caused other agencies--notably the Park Service and Forest Service--to undertake "administrative surveys" on their own when they could not wait the time, often years, required for the completion of an official cadastral survey. Lacking the full weight of Federal law, these boundaries will eventually have to be resurveyed, a costly duplication of effort. In some cases, most notably with the National Park Service, disagreements over cadastral survey authority have led to conflict and even litigation.

The second dimension is managerial. It has been difficult for the Cadastral Survey Program to develop a comprehensive picture of surveying requirements and priorities in part because of its decentralized administrative structure and in part because of difficulties with obtaining workload and priority projections from other agencies.

BLM is addressing both problem areas. In November 1978, before the release of the House report, BLM's Office of Program Evaluation initiated its own comprehensive review of the Cadastral Survey Program. Following the release of the House report, this effort was replaced by a study team made up of Task Forces on interagency coordination and cooperation, contracting and authorities, and management and organization, which was instructed to prepare a comprehensive response, to the investigative report. An interim report was issued in the Spring of 1979. A final report to Congress will be presented in March, 1980.

In the interim, BLM has taken several other steps to improve the productivity, planning, and interagency coordination in the program:

- 16 positions were reallocated to Cadastral Survey;
- A Memorandum of Understanding with the National Park Service was updated to permit long-range planning and is awaiting approval;
- Procedures for delegating field survey authority to the U.S. Forest Service, subject to BLM's instruction and approval, are being prepared;

- Efforts to update and develop a more accurate and useful inventory of workload, including coordination requirements with all affected agencies, were strengthened;
- Staffing requirements of the Cadastral Survey Program in relation to other Departmental programs were re-examined;
- The extent to which the Secretary's survey authority may be contracted out to private surveying firms was examined.

Budget and Performance Analysis Alaska Program

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Technical Services
2. Field Administrators: Director, Alaska State Office

B. Authorizing Legislation

Federal Land Policy and Management Act of 1976, 43 U.S.C. 1711, 1728, P.L. 94-579; Bureau of Land Management Appropriations Authorization of 1978, 43 U.S.C. 1748, P.L. 95-352; Alaska Native Claims Settlement Act of 1971, 43 U.S.C. 1612, P.L. 92-203; Alaska Act of Admission as amended, 48 U.S.C. 2, P.L. 85-508

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	11,000	11,000
2. Budget Authority ($000's)	10,077	10,966	11,120

D. Appropriation Structure

1. Title: Management of Land and Resources
2. Activity: Cadastral Survey
3. Subactivity: Alaska Survey

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	7,539	10,966	8,590	11,120
2. Work Years	127	140	132	140

F. Performance

Acres Required to be Surveyed	Through FY 1979	Estimate FY 1980	Estimate FY 1981	Remaining to be Surveyed	Surveys Planned for Completion by
ANCSA (44,000)	22,650	5,700	3,990	11,660	1985
State Selections (104,450)	34,070	2,100	3,810	64,470	1995
Other (1,500)	350	50	50	1,050	2000+
Total (149,950)	57,070	7,850	7,850	77,180	

G. Evaluations (Completed, Underway, and Planned)

See Evaluations, Budget and Performance Analysis Lower 48 States

Budget and Performance Analysis Lower 48 States

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Technical Services

2. Field Administrators: Director, Denver Service Center and Directors, State Offices

B. Authorizing Legislation

Federal Land Policy and Management Act of 1976, 43 U.S.C. 1711, 1738, P.L. 94-579; Bureau of Land Management Appropriation Authorization of 1978, 43 U.S.C. 1748, P.L. 95-352; Act of May 18, 1976, (1 Stat. 465)

C. Funding

	1978	1979	1980
1. Authorization ($000°s)	N/A	11,900	10,800
2. Budget Authority ($000°s)	8,710	12,396	12,640

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Cadastral Survey
3. Subactivity: Lower 48 States

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000°s)	10,665	12,396	12,829	12,640
2. Work Years	343	440	426	440

F. Performance

Work Units

1. Cartography (number)	415	255	235	536
2. Original Survey (miles)	321	170	404	173
3. Resurveys (miles)	10,996	10,652	10,285	8,961
4. Special Surveys (miles)	287	114	79	80
5. Remonumentation (number)	215	150	498	110

G. Evaluations (Completed)

1. Organization: House Appropriation Committee's Survey and Investigation Staff
2. Title and Date: A Report to the House Committee on Appropriation's Subcommittee on the Interior and Related Agencies: Cadastral Survey Program of the Department of the Interior and the U.S. Forest Service, February 1979.
3. Major Findings: See "Current Issues" section above for discussion of both findings and subsequent action.

1. Organization: Bureau of Land Management
2. Title and Date: Cadastral Survey Program Support Paper, January 5, 1979
3. Major Findings: The report identified a lack of an adequate number of professional cadastral surveyors, travel ceiling limitations, a hectic schedule because of unplanned-for survey requests, and a lack of long-term funding commitments as major sources of difficulty for the program.
4. Subsequent Action: Action has been taken to improve long-range planning. Progress is being made toward delegating cadastral survey task to other agencies. Sixteen positions have been reallocated to Cadastral Survey to increase productivity.

1. Organization: Department of the Interior, Office of Audit and Investigation
2. Title and Date: Review of the Reimbursable Program, Office of Cadastral Survey, Denver Service Center, November 24, 1978
3. Major Findings: A review of reimbursable surveys conducted out of the Denver Service Center found a huge backlog of requests, unwillingness or insufficient funds from other agencies to complete work started in the past but not completed, and inability on the part of BLM to monitor survey costs effectively.

1. Organization: Department of the Interior
2. Title and Date: Status Report - Department of the Interior Surveying and Mapping Study Team, August 1978

3. Major Findings: The report found problems of both quality and quantity with Cadastral Survey Program staffing and found shortcomings in survey performance methods. It recommended the establishment of a strong survey unit in the Department to oversee and control cadastral survey and land records.

1. Organization: Department of the Interior, Office of Audit and Investigation
2. Title and Date: Interim Report on the Cadastral Survey Program, April 1978
3. Major Findings: The primary recommendation of this report, which studied the conflict between the National Park Service and BLM over which agency should execute boundary surveys, was the preparation of a Memorandum of Understanding between BLM and the National Park Service.
4. Subsequent Action: A Memorandum of Understanding was prepared and agreed to by Park Service Staff and Cadastral Survey but has not received final approval.

1. Organization: Bureau of Land Management
2. Title and Date: Experimental Cadastral Survey Contract, Colorado, April 1974
3. Major Findings: The contracted survey was more costly but of the same quality as if it had been done by BLM. Contracting for Surveys is a viable alternative.
4. Subsequent Action: Contract surveys are used for original surveys but have been found to be less satisfactory for resurvey or special surveys.

1. Organization: Office of Management and Budget
2. Title and Date: Report of the Federal Mapping Task Force on Mapping, Charting, Geodesy, and Surveying, July 1973
3. Major Findings: The report criticized dispersed mapping, charting, and geodesy operations for contributing to a backlog of unmet needs for surveys and data and an uncoordinated survey system. The report suggested the transfer of many of BLM's cadastral functions to a new central mapping, charting, and geodesy agency that would define and implement a National program.
4. Subsequent Action: None

1. Organization: Bureau of Land Management
2. Title and Date: Survey Review - A Team Report, February 1969
3. Major Findings: This study of the productivity, organization, budgeting, and responsibilities of the Cadastral Survey Program recommended that BLM be responsible for all Federal surveys, arranging for other agencies survey needs through Memoranda of Understanding, that comprehensive long-term work plans be developed, and that procedures from communications, surveying, and survey approval be improved.

H. Evaluations (Underway)

1. Organization: Bureau of Land Management
2. Title: Review of the Cadastral Survey Program

I. Evaluations (Planned)

None

MANAGEMENT SUPPORT

CONSTRUCTION AND MAINTENANCE--BUILDING, RECREATION, AND TRANSPORTATION

When BLM was established in 1946, its physical facilities were inherited from its parent agencies, the General Land Office and the Grazing Service. Building space was provided by the General Services Administration. The primitive road system on the public lands reflected the miscellaneous access needs of ranchers, mining companies, railroads, and county and State governments. Many additional miles of road had been built by the Civilian Conservation Corps in the 1930's. Recreation facilities were nonexistent.

As its role in managing the public lands grew, BLM inherited facilities from other agencies, such as the Civilian Conservation Corps and the Fish and Wildlife Service. Investment in construction on the lands remained extremely modest, however, because BLM was still considered an interim custodian of the land pending ultimate disposition. New road construction was limited to those necessary for the development of timber resources in the Oregon and California grant lands, then gradually expanded into other timber regions in California, Idaho, Colorado, and Wyoming. Building construction until 1963 was limited to firefighting facilities in Alaska. In the 1960's, BLM's custodial role gave way to the concept of retention. The new policy was stated clearly in the Classification and Multiple Use Act of 1964 and in the legislation creating the Public Land Law Review Commission. At the same time, public use of BLM lands had rocketed, especially recreational use. The existing primitive road system was inadequate to the heavy influx of a new kind of traffic--automobiles and recreational vehicles.

In 1964, contract authority under the Public Lands Development Roads and Trails appropriation empowered BLM to construct roads needed for access to any development or for protection of the public lands, and in 1978 the Transportation Construction Program was added to provide funds for roads, trails, landing fields, and bridges as part of its transportation system.

Recreation facilities, including sanitary facilities, picnic tables, fire rings, well-water supplies, and visitor service facilities were also constructed to accommodate the roughly 80 million annual visitors who camp, hike, picnic, hunt, fish, raft, rockhound, or drive recreational vehicles on the public lands.

By 1967, BLM had begun to construct its own office buildings, warehouses, shops, and other facilities tailored to BLM's resource management obligations. Although BLM continues to obtain most of its building space from the General Services Administration, rapid growth and the shortage of GSA facilities, especially in remote locations, often force BLM to construct its own. Specialized structures such as telecommunication facilities, well pumping buildings, seed storage bins, greenhouses, laboratories, shops, and warehouses are also frequently built to order.

Together, the Building, Recreation, and Transportation Construction and Maintenance Programs provide and manage the facilities needed to provide services for and ensure the safety of visitors to the public lands and to support BLM's land and resource management objectives. The programs handle all phases of new construction—survey, design, contracting operations, environmental analysis, and general administration—and provide timely maintenance for all BLM-owned facilities.

Progress Report

In fiscal 1979, BLM began or completed construction of buildings on 10 administrative sites and of housing units for BLM personnel at one site in Hanksville, Utah.

We have identified construction needs at more than 35 locations, including 38 buildings. These plans will be executed in a manner responsive to developing resource management and land-use plans and consistent with sometimes unpredictable scheduling and budgetary constraints.

In fiscal year 1979, maintenance was provided to 567 structures, including office buildings, warehouses, shops, storage buildings, fire stations, lookouts, and related facilities such as parking areas and warehouses. Over the past few years, special emphasis has been placed on corrective maintenance for energy conservation. In 1980 the maintenance program will continue to emphasize the reduction of fuel consumption through such measures as the installation of storm windows and doors and the addition of insulation.

Transportation construction, with the exception of timber access roads, has been at a low level pending completion of resource management plans incorporating transportation plans and of the wilderness review required by section 603 of FLPMA. Many existing miles of road will no longer need to be maintained, while in other areas new construction may be necessary.

During fiscal 1979, BLM constructed or surfaced roads or trails at 10 locations exclusive of timber-sale roads and constructed five bridges excluding timber-sale bridges. BLM performed maintenance on 9,298 miles of road, 442 miles of trail, and 13 bridges, emphasizing those that receive the greatest use and have the highest erosion potential if maintenance is deferred.

Recreation facilities are constructed in accordance with recreation-use plans developed within the BLM planning system. During fiscal 1979, construction was begun or completed on six recreation sites. We have identified 13 other planned projects throughout the West and in Alaska, including visitor centers, sanitary facilities, cave protection work, campsites, and information stations.

Recreation facility maintenance in fiscal 1979 involved work at 1,875 undeveloped sites (sites without water) and at 2,786 "family units" or developed campsites. In addition, more than 500 hazards were removed or mitigated, such as filling in abandoned mine shafts, removing dead trees, or barricading precipices to improve visitor safety.

Current Issues

As BLM's program responsibilities expand to keep pace with public interest in and use of its lands, construction and maintenance become increasingly pressing concerns. Lack of office and storage space are often problems. Because there is no provision for acquiring or constructing facilities on the basis of projected rather than existing need, the availability of facilities may lag behind the need for them.

At the same time, BLM shares with facility managers at all levels of government the difficulty of obtaining priority attention for facility maintenance in the face of the greater appeal of new construction. However, as the intensity of public use of its facilities increases, BLM will increasingly emphasize its maintenance responsibilities.

Increasing use of the public lands takes its toll on BLM roads and trails in erosion problems resulting from heavy use of poorly surfaced roads. Poor water drainage control can result in as much as 100 tons of soil loss per mile of poorly surfaced road each year. Few BLM roads are designed for present use levels or for passenger vehicles. Of the 44,000 miles of road, 32,000 are primitive and approximately 30,000 of these primitive miles need to be upgraded. Many of these roads can only be used seasonally. Moreover, their primitive character can be hazardous to motorists accustomed to the highly developed roads in urban areas.

While BLM constructs and maintains its transportation system primarily to support its own resource management objectives, the public and local authorities often expect BLM to construct and maintain the roads up to the standards of State and county roads. Such demands for expensive improvements, which fall outside BLM's resource management responsibilities or authority, will increase as the number of users grows. In these cases, if the traffic volume warrants, the road may hve to be transferred to the local public road authority.

Considering the need for recreation facilities—in 1978 it was estimated that existing facilities accommodated less than 15% of demand—BLM constructs and maintains a very modest number of functional facilities for use by the general public. Particular problems relating to high visitor use occur in the California Desert, along the Colorado River between California and Arizona, in caves in New Mexico, in the El Malpais areas of New Mexico, the Little Sahara sand dunes in Utah, and the upper Missouri River in Montana.

Current plans are to paee new construction with the completion of resource management plans to ensure that the Bureau is fully prepared to deal with the increased use that follows increases in visitor service facilities.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Technical Services
2. Field Administrators: District Managers

B. Authorizing Legislation

Federal Land Policy and Management Act, P.L. 94-579, 43 U.S.C. 1731 et seq.; Bureau of Land Management Appropriation Authorizations, P.L. 95-352, 43 U.S.C. 1748; Timber Protection Act of 1922, P.L. 67-315

Building Construction

C. Funding	1978	1979	1980
1. Authorization ($000's)	N/A	6,300	7,200
2. Budget Authority ($000's)	3,570	4,125	2,438

D. Appropriation Structure

1. Title: Acquisition, Construction and Maintenance
2. Activity: Construction
3. Subactivity: Building Construction

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	4,413	4,125	1,546	2,438
2. Work Years	23	20	17	17

F. Performance

Work Units

1. Project Surveys & Design(number)	4	8	9	12
2. Construction (number)	1	3	3	10

Recreation Construction

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	1,300	800
2. Budget Authority ($000's)	1,380	605	1,321

D. Appropriation Structure

1. Title: Acquisition, Construction and Maintenance
2. Activity: Construction
3. Subactivity: Recreation Facilities

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	1,394	605	795	1,321
2. Work Years	10	8	9	10

F. Performance

Work Units

1. Project Survey & Design (number)	3	13	35	32
2. Construction (number)	8	19	15	16

G. Evaluations (Completed, Underway and Planned)

None

Transportation Construction

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	4,900	4,200
2. Budget Authority ($000's)	4,965	4,263	2,075

D. Appropriation Structure

1. Title: Acquisition, Construction and Maintenance
2. Activity: Construction
3. Subactivity: Transportation

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	6,833	4,263	3,112	2,075
2. Work Years	64	60	53	50

F. Performance

Work Units

1. Project Survey & Design	87	186	178	124
2. Construction (miles)	145	97	82	42

G. Evaluations (Completed, Underway, and Planned)

None

Building Maintenance

C. Funding	1978	1979	1980
1. Authorization ($000's)	N/A	2,500	2,400
2. Budget Authority ($000's)	2,011	2,548	2,596

D. Appropriation Structure

1. Title: Acquisition, Construction and Maintenance
2. Activity: Maintenance
3. Subactivity: Building Maintenance

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	2,099	2,548	1,996	2,596
2. Work Years	50	55	55	55

F. Performance

Work Units

Buildings (number)	360	712	567	650

G. Evaluations (Completed and Planned)

None

H. Evaluations (Underway)

1. Organization: Bureau of Land Management, Washington Office
2. Title: Maintenance Program Evaluation

Recreation Facilities Maintenance

C. Funding	1978	1979	1980
1. Authorization ($000's)	N/A	3,600	3,300
2. Budget Authority ($000's)	3,064	3,638	3,341

D. Appropriation Structure

1. Title: Acquisition, Construction and Maintenance
2. Activity: Maintenance
3. Subactivity: Recreation Facilities

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	2,913	3,638	3,305	3,341
2. Work Years	98	108	103	101

F. Performance

Work Units

1. Hazard Reduction (Number)	268	360	515	684
2. Project Survey & Design (Number)	76	24	31	10
3. Maintenance, Bldg. Recreation (Number)	4,252	4,345	4,661	3,620

G. Evaluations (Completed and Planned)

None

H. Evaluations (Underway)

1. Organization: Bureau of Land Management, Washington Office
2. Title: Maintenance Program Evaluation

Transportation Maintenance

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	2,300	2,500
2. Budget Authority ($000's)	2,217	2,280	2,337

D. Appropriation Structure

1. Title: Acquisition, Construction and Maintenance
2. Activity: Maintenance
3. Subactivity: Transportation

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	2,573	2,280	2,347	2,337
2. Work Years	54	54	52	52

F. Performance

Work Units

1. Project Surveys & Design (number)	229	370	342	219
2. Maintenance, Road (miles)	10,077	9,701	9,766	8,179
3. Inventory (miles)	1,182	1,425	1,621	1,763

G. Evaluations (Completed and Planned)

None

H. Evaluations (Underway)

1. Organization: Bureau of Land Management, Washington Office
2. Title: Maintenance Program Evaluation

LAND ACQUISITION

BLM's authority to acquire land and interest in land prior to passage of FLPMA was narrowly circumscribed. The first BLM acquisition authority was for easements across private land, an important factor for forest management in western Oregon where land ownership is intermingled in checkerboard fashion. Special legislation calling for intensified management at such areas as King Range in California or along the Pacific Crest Trail brought with it the authority to acquire fee title. In 1976, FLPMA gave BLM general acquisition authority but strictly limited condemnation authority to situations where narrow corridors are needed to give access to public lands which would otherwise be blocked. FLPMA also authorized the use of money from the Land and Water Conservation Fund to acquire lands that are primarily valuable for outdoor recreation.

Progress Report

In fiscal year 1979, BLM spent $1,064,673 on both fee and easements under a variety of authorities. The largest single category of spending was $557,500 for 60 scenic easements along the Rogue River in southern Oregon, as authorized in the Wild and Scenic Rivers Act. Another significant acquisition expenditure was $179,000 from the Land and Water Conservation Fund for two recreation sites. Two administrative sites cost $159,000 and numerous easements for forest management cost $80,000.

Current Issues

It is BLM's policy to use its acquisition authority sparingly, not to add significant new acreage to the public domain, but to resolve anomalies in ownership problems or to acquire narrow easements which contribute in some significant manner to multiple-use and sustained-yield management objectives.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Lands and Rights-of-Way

2. Field Administrators: District Managers

B. Authorizing Legislation

Federal Land Policy and Management Act, P.L. 94-579, 43 U.S.C. 1701 et seq. especially 1715 and 1748; Taylor Act, P.L. 73-482, 43 U.S.C. 315; Oregon and California Sustained Yield Act, P.L. 75-405, 430 U.S.C.

1181 a-f; National Trails System Act, P.L. 90-543, 16 U.S.C. 1241-49 especially 1245(a); Wild and Scenic Rivers Act, P.L. 90-542, 16 U.S.C. 1271 et seq. especially 1277; King Range National Conservation Area, P.L. 91-476; 16 U.S.C. 460y especially y-4; BLM Appropriation Authorization, P.L. 95-352, 43 U.S.C. 1748.

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	1,700	1,700
2. Budget Authority ($000's)	1,500	1,552	2,235

D. Appropriation Structure

1. Title: Acquisition, Construction, and Maintenance
2. Activity: Acquisitions

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	1,282	1,552	1,653	2,235
2. Work Years	47	52	49	55

F. Performance

Work Units

1. Examinations	39	110	52	83
2. Title Transfers	114	254	115	267
3. Projects Surveys & Designs	125	157	113	186

GENERAL ADMINISTRATION

General Administration includes executive direction (which in practice means funding BLM's major line officers) as well as the following functions in Washington and at the Denver Service Center: budget and program development, personnel management, procurement and contracting, property management, and fiscal operations.

In programming and budgeting, the Washington reorganization created an Office of Policy Analysis and Program Development placed under the new Deputy Director for Policy, Programs and Budget, who also directs the already well-established Budget Office. Having a Deputy Director to give immediate direction to policy-making, programming, and budgeting created a closer linkage among these three vital management functions.

Beginning in 1979, implementing the new Civil Service Reform Act became a continuing priority of the Personnel Division. In 1979, it converted supergrade executive positions into the new Senior Executive Service. The Department of the Interior used BLM's performance appraisal plan as a model for other bureaus and offices. The Civil Service Reform Act strengthened performance requirements for Civil Service employees. BLM adapted to these requirements with little difficulty, because it already had a Performance Evaluation and Performance Improvement Plan. Twenty Federal agencies including the General Accounting Office and the State of New York have come to BLM for guidance in performance-oriented evaluations.

The Personnel Division developed a placement plan to effect the Washington Office reorganization. As a result of a concerted effort, 145 of 153 affected employees either were placed without loss of grade or elected to retire under early retirement provisions authorized by the Office of Personnel Management.

Purchasing, contracting, space, and motor vehicle management fall under the responsibility of the Administrative Services Division. During fiscal 1979, BLM spent $108 million for goods and services, of which $25 million was spent by the Washington Office, mainly for the OCS Environmental Studies Program. Contracting for the Western States and Alaska is consolidated in the Denver Service Center, which arranged for construction, studies, supplies, and services costing $50 million. Field offices expended $33 million, mostly in small purchases.

BLM has made purchases from small and minority businesses whenever possible. As a result, purchases from minority-owned firms tripled to $7 million. Purchases for less than $10,000 are required to go to small businesses, except when larger businesses are a sole source or are on a General Services Administration schedule. Fifty-five percent of BLM purchases were made from small businesses. Government-wide procurement regulations are complex and training is a constant need. A one-week small purchase course was given to a total of 45 field people during the year. In addition, 90 natural resource specialists who initiate and monitor contracting work were given a one-week course in contracting procedures and requirements.

It takes 4.1 million square feet of improved real property with a capitalized book value of over $750 million to support public land management efforts. Of this BLM has direct jurisdiction over 1.3 million square feet with a capitalized book value in excess of $350 million. It leases from GSA 2.8 million square feet at annual charges of over $10 million. Energy conservation is being stressed in space management as evidenced by BLM's efforts to adjust temperatures, install storm doors, and add insulation. An energy audit was made of all buildings over 5,000 square feet for which BLM has direct responsibility and changes that could increase energy efficiency were identified. BLM is experimenting with more efficient use of space by employing "open space" rather than partitioned space arrangements and is continuing to review the new practice, which has enabled BLM to assign 100 square feet per employee and at the same time give consideration to the convenience of the public.

The BLM fleet numbers 3,400 motor vehicles which GSA permanently assigns, plus 900 vehicles under BLM's direct jurisdiction. During fiscal year 1979, these vehicles were driven over 40 million miles. As a BLM contribution to Federal government energy conservation, 57 percent of BLM's recent vehicle acquisitions have been compact pick-ups -- a move estimated to save 140,000 gallons of gas annually.

FLPMA's Section 306 authorized a working capital fund to provide facilities, equipment, and supplies on a self-sustaining, revolving basis. The fund was established on June 1, 1978. FLPMA authorized $3,000,000, of which $2,000,000 was appropriated. BLM has developed a long-range plan to identify and phase in various classes of supplies and equipment best managed through a working fund. The first class of equipment incorporated into the fund was the motor vehicle fleet. Three additional areas are being investigated in fiscal 1980 for possible inclusion in the working capital fund: aircraft operations, stores, and communications equipment.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Administration.

2. Field Administrators: Delegations vary between different functions and within the same function so that a general identification of field level administrators is not possible.

B. Authorizing Legislation

Federal Land Policy and Management Act, P.L. 94-579, 43 U.S.C. 1701 et seq. especially 1731, 1734, 1735, 1736, 1737; Title 5 U.S.C., P.L. 89-554, Government organization and Employees especially Part III as amended by Civil Service Reform Act P.L. 95-454; Federal Property and Administrative Services Act of 1949, P.L. 81-288, 40 U.S.C. 471 et seq.

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	3,500	5,000
2. Budget Authority ($000's)	3,728	3,827	3,803

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Administration and Enforcement
3. Subactivity: General Administration

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	4,033	3,827	3,445	3,803
2. Work Years	155	170	168	170

F. Performance

Work Units	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Process payroll documents (000's) # of actions to process T/A reports, W-2's and the various entries which are part of payroll such as deductions bonds, etc.			1,230	1,250
2. Process billings & payments documents (000's)			165	175
3. Process personnel actions (#)			1,800	1,850
4. Award negotiated contracts (#)			550	570
5. Award formally advertised contracts			340	340

G. Evaluations (Completed, Underway, and Planned)

None

LAW ENFORCEMENT

Until 1976, the Federal Government relied almost completely on State and local enforcement officials to enforce State law as it applied to the public lands and their resources. Occasionally, the Federal Bureau of Investigation would act to enforce Federal law when gross violations, such as major timber thefts, would occur. The Taylor Grazing Act gave the Secretary of the Interior authority to prosecute violators of laws or regulations but limited that authority by making punishment subject to proof of willful violation. FLPMA's Section 303, passed in 1976, requires the Secretary of the Interior to issue regulations to effect its provisions and subjects anyone found guilty of knowingly and willingly violating them to fine and imprisonment. While placing a great deal of reliance upon local law enforcement officials, FLPMA also authorizes the Secretary to use Federal personnel to carry out FLPMA's law enforcement provisions.

A concerted law enforcement effort on the public lands began shortly before the passage of FLPMA. The Wild Free Roaming Horse and Burro Act of 1971 provided basic authority for the hiring of BLM's first Special Agents. Amendments to the Sikes Act of 1974 and other subsequent special acts added additional authority in specified areas. But it was the passage of FLPMA that gave BLM general law enforcement authority covering all its lands.

Currently, BLM relies on three different types of law enforcement agents: uniformed rangers who are assigned to patrol the California Desert; special agents who investigate and prepare cases for prosecution; and local law enforcement officers working under contracts or cooperative agreements. Some 25 to 30 percent of BLM law enforcement funds is spent on cooperative programs.

Progress Report

BLM law enforcement specialists estimate that 85 percent of their work involves crimes against property, including wild horses. Something of the value and diversity of public land resources can be seen in the list of cases which special agents have investigated in the last five years: timber theft, wild horse killing and theft, desert land entry fraud, removal of cactus for commercial use, mineral theft, range arson, theft and destruction of coral on the Outer Continental Shelf, destruction of recreation sites, trespass on public lands, removal or defacement of antiquities, and public lands survey marker destruction.

In 1979, BLM employed 17 rangers and 18 special agents, all well-trained in law enforcement. Many of them have degrees in some phase of public land management and all have completed an eight-week police school at the Federal Law Enforcement Training Center or its equivalent. Four new agents were hired to facilitate investigation of the Alabama coal trespass, which involved the theft of large amounts of Federally-owned subsurface coal, to improve enforcement of the Wild Free Roaming Horse and Burro Act, and to assist in prosecuting abusers of the Adopt-A-Horse Program.

Current Issues

Current BLM law enforcement authority consists of arrest authority or authority to issue warnings. There is no intermediate authority to issue citations for court appearances. Experience indicates that the arrest, imprisonment, and fine authority under FLPMA is too severe to be effective and that the vast majority of offenses would best be dealt with by citation. This situation was publicly discussed at a Federal Land Policy and Management Act Symposium recently sponsored by the University of Arizona. Following the publication of the symposium, Senator Henry Jackson introduced legislation (S-2209) to confer such authority.

A study of law enforcement on the public lands completed for BLM in 1979 by the National Sheriff's Association reported that local law enforcement authorities, while very willing to cooperate with BLM and accept Federal funds for the enforcement of State and local laws on public land, are less eager to enforce Federal law there. Local officials are reluctant to pursue additional training or to learn about Federal court procedures, both of which are necessary if they are to take on Federal law enforcement duties. The possibility of increasing law enforcement on the public lands through contracts with local law enforcement agencies, therefore, looks slim. Local law enforcement priorities are sometimes at odds with BLM's national values, and it is difficult in such cases for BLM to exercise national enforcement priorities. Any intensification of the law enforcement effort directed principally at protecting national values may require Federal funding of BLM personnel.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Technical Services
2. Field Administrator: State Directors

B. Authorizing Legislation

Federal Land Policy and Management Act, 43 U.S.C. 1701 et seq especially 1733, P.L. 9-579; Taylor Act, 43 U.S.C. 315, P.L. 73-482; Sikes Act, 16 U.S.C. 670, P.L. 95-420; Wild Free Roaming Horse and Burro Act, U.S.C. 1331-40, P.L. 92-1951; Land and Water Conservation Fund Act of 1965, 16 U.S.C. 406b, P.L. 88-5758; National Trails Act, 16 U.S.C. 1061-64, P.L. 59-209; Antiquities Act, 16 U.S.C. 433, P.L. 59-209; Unlawful Enclosure Act, 43 U.S.C. 1061-64, P.L. 48-149; Act of June 3, 1878, 16 U.S.C. 604-606; Archaeological Resources Protection Act of 1979, 16 U.S.C. 470aa et seq., P.L. 96-95; 18 U.S.C. Crimes and Criminal Procedures especially 47, 111, 641, 1601, 1361, 1510, 1851, 1861; Bureau of Land Management Appropriation Authorization of 1978, P.L. 95-352.

C. Funding

	1978	1979	1980
1. Authorization ($000's)	N/A	1,100	2,200
2. Budget Authority ($000's)	772	871	873

D. Appropriation Structure

1. Title: Management of Lands and Resources
2. Activity: Administration and Enforcement
3. Subactivity: Law Enforcement

E. Program Costs

	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	625	871	569	873
2. Work Years	16	16	16	16

F. Performance

Work Units

1. Cooperative Agreements	12	23	23	24
2. Cases Investigated	250	500	484	524

G. Evaluations (Completed)

1. Organization: Bureau of Land Management
2. Title or Subject: Law Enforcement Program Analysis, October 1978
3. Major Findings:

   a. A complete integration of law enforcement and natural resource management has not taken place;

   b. Law enforcement is viewed as criminal justice ancillary to natural resources;

   c. Lack of adequate articulation that law enforcement is confined to enforcement of criminial violations and not used in civil or administrative processes;

   d. There is a distinct need for authority to issue citations.

   e. The dual nature to this ranges as both natural resource managers and law enforcement officials is not sufficiently clear.

4. Subsequent Action: See Current Issues. Law enforcement specialists and their particular perspective on land use planning are being gradually integrated into BLM's land use planning programs.

H. Evaluations (Underway and Planned)

None

FINANCIAL MANAGEMENT

RECEIPTS AND ALLOCATIONS

The development and use of public land resources managed by BLM generate receipts from a variety of sources. Bonus bids and royalties from the leasing of Outer Continental Shelf resources account for the vast majority of receipts, roughly 81 percent of total receipts in fiscal year 1979, for example. Continuing public interest in mineral exploration on public lands is strongly reflected in the 1978, 1979, and projected 1980 receipts from BLM programs—a trend started in 1973 when international energy supplies became increasingly unstable and costly.

Offshore oil and gas leasing on the Outer Continental Shelf (OCS) resulted in an increase in 1979 of about $1 billion over the $2.2 billion received in 1978. Sales scheduled for 1980 may bring total OCS-related receipts to $6.3 billion.

Onshore receipts are generated from timber sales, grazing fees, oil and gas, coal, and other leasable minerals, hardrock mineral development, and various user fees. Again, the minerals dominate. Onshore mineral receipts amounted to $402 million in 1978, increased to $486 million in 1979, and are expected to go to about $600 million in fiscal year 1980.

Exclusive of the Offshore OCS Leasing Program, receipts from the development and use of the resources of public lands were allotted in fiscal year 1979 under a variety of revenue-sharing programs as follows:

- $329.6 million or 42 percent were returned to States and counties;
- $198.3 million or 25 percent were distributed to the Reclamation Fund and other special funds;
- $256.6 million or 33 percent were deposited in the U.S. Treasury general fund.

FLPMA increased revenue sharing by amending the Mineral Leasing Act to raise the share of mineral leasing receipts returned to the States from 37½ percent to 50 percent. FLPMA also stated that these funds could be used for any purpose a State legislature directs, with priority to be given to the State subdivisions that are socially or economically impacted by mineral development.

In 1976, Congress passed the Payments in Lieu of Taxes (PILT) Act to authorize payments to local units of government containing Federally-owned tax-exempt lands. These payments supplement revenue-sharing funds and are made directly to local governments. BLM is responsible for processing PILT payments for Federal entitlement lands administered by BLM and six other Federal agencies and in 1979 processed payments totaling about $104 million.

FISCAL YEAR 1978

STATEMENT OF PUBLIC LANDS RECEIPTS

Mineral Leases and Permits	$ 402,286,094
Sales of Public Land and Material	1,609,366
Sales of Public Timber	10,219,126
Fees and Commissions	31,813,475
O&C Lands (Timber Sales)	172,579,472
Coos Bay Wagon Road Lands (Timber Sales)	12,594,793
Grazing Fees	15,590,142
Rights-Of-Way	862,186
Miscellaneous Leases and Permits	5,207,860
Nonoperating Revenue*	11,226,862
Other**	590,332
Total	$ 664,579,708

ALLOCATION OF PUBLIC LANDS RECEIPTS

States and Counties	$ 280,359,772
Reclamation Fund	158,961,034
Indian Trust Funds	348,903
General Fund	224,909,999
Total	$ 664,579,708

STATEMENT OF OCS RECEIPTS

Outer Continental Shelf	$ 2,276,494,211

ALLOCATION OF OCS RECEIPTS

General Fund	$ 2,259,308,176
Escrow Account	17,186,035
Total	$ 2,276,494,211

*Incidental receipts from fines, taxes, etc., which are unrelated to routine public land administration.

**Receipts from miscellaneous materials sales under the Materials Disposal Act.

FISCAL YEAR 1979

STATEMENT OF PUBLIC LANDS RECEIPTS

Mineral Leases and Permits	$ 486,480,307
Sales of Public Land and Material	9,239,954
Sales of Public Timber	13,789,941
Fees and Commissions	39,730,131
O&C Lands (Timber Sales)	193,548,297
Coos Bay Wagon Road Lands (Timber Sales)	10,870,170
Grazing Fees	18,976,265
Rights-Of-Way	869,213
Miscellaneous Leases and Permits	1,187,265
Nonoperating Revenue*	8,991,523
Other**	900,581
Total	$ 784,583,647

ALLOCATION OF PUBLIC LANDS RECEIPTS

States and Counties	$ 329,596,184
Reclamation Fund	197,579,280
Indian Trust Funds	768,437
General Fund	256,639,746
Total	$ 784,583,647

STATEMENT OF OCS RECEIPTS

Outer Continental Shelf	$ 4,171,646,025

ALLOCATION OF OCS RECEIPTS

General Fund	$ 3,267,375,733
Escrow Account	904,270,292
Total	$ 4,171,646,025

*Incidental receipts from fines, taxes, etc., which are unrelated to routine public land administration.

**Receipts from miscellaneous materials sales under the Materials Disposal Act.

FISCAL YEAR 1980

ANTICIPATED PUBLIC LANDS RECEIPTS

Mineral Leases and Permits	$ 600,000,000
Sales of Public Land and Material	3,400,000
Sales of Public Timber	12,700,000
Fees and Commissions	45,000,000
O&C Lands (Timber Sales)	220,000,000
Coos Bay Wagon Road Lands (Timber Sales)	10,000,000
Grazing Fees	26,000,000
Rights-Of-Way	800,000
Miscellaneous Leases and Permits	17,600,000
Total	$ 935,500,000

ALLOCATION OF PUBLIC LANDS RECEIPTS

States and Counties	$ 393,000,000
Reclamation Fund	233,000,000
Indian Trust Funds	900,000
General Fund	308,600,000
Total	$ 935,500,000

ANTICIPATED OCS RECEIPTS

Outer Continental Shelf	$ 6,300,000,000

ALLOCATION OF OCS RECEIPTS

General Fund	$ 4,800,000,000
Escrow Accounts	$ 1,500,000,000
Total	$ 6,300,000,000

PAYMENTS IN LIEU OF TAXES

In 1976, Congress passed the Payments in Lieu of Taxes (PILT) Act to authorize annual payments to local units of government containing certain Federally-owned, tax-exempt "entitlement" lands. Serving as a supplement to revenue-sharing funds, PILT payments are made directly to local governments and may be used for any governmental purpose.

The act stipulates that entitlement land payments equal to the greater of either 75 cents per acre, reduced by the amount received in the preceding fiscal year from certain revenue sharing acts, or 10 cents per acre, with no revenue-sharing reductions, are to be made each year. These payments may not, however, exceed specified limitations based on population. Additional payments are made for each of the first 5 years for lands or interests therein acquired, after 1970, for additions to the National Park System and the National Forest Wilderness System provided property taxes were paid the last 5 years they were privately owned. Payments for each year are equal to 1 percent of their fair market value when acquired but not in excess of the amount of real property taxes assessed and levied in the last year the land was in private ownership.

BLM processes PILT payments for Federal entitlement lands administered by BLM and six other Federal agencies: National Park Service, the U.S. Forest Service, the U.S. Corps of Engineers, the Water and Power Resource Service (formerly the Bureau of Reclamation), the Department of the Army, and the Fish and Wildlife Service. These agencies furnish current acreage information, the Bureau of Census provides current population statistics and State governments report the amount of revenue sharing funds passed through to local governments.

"Entitlement lands" consist of lands in the National Forest System and the National Park System, lands administered by BLM, lands dedicated to the use of Federal water resource development projects, dredge disposal areas under the jurisdiction of the Army Corps of Engineers and, effective in fiscal year 1979, National Wildlife Reserve Areas, inactive and semiactive Army installations and certain lands donated to the United States Government. The act specifically prohibits payments for lands (but not certain donated lands) that were tax-exempt before being acquired from State or local governments.

Since PILT payments were started on September 30, 1977, over $304 million has been paid to the 50 States; about $104 million of that amount was paid in fiscal year 1979.

The PILT computation process requires each State to submit data on the amount of revenue-sharing funds received by units of local government in the preceding fiscal year. This amount is then deducted from the PILT payments for the current year. In fiscal year 1978, $87.3 million was deducted from PILT payments as a result of the revenue-sharing provision. In fiscal year 1979, these deductions increased to $148.3 million.

Following distribution of the 1977 payments, two units of local government in Nevada and the States of South Dakota, North Dakota, Colorado and Kansas protested the extent to which BLM included revenue-sharing payments in computing payments to local units of government. They argued that revenue-sharing funds distributed to school districts should not be counted as receipts by the units and therefore should not be subtracted from their PILT payments. The case was submitted to the Comptroller General, who, in October, 1978, ruled that Federal revenue-sharing payments that States either pass through directly to school districts or other single or special purpose districts or pay to local governments which are required by State law to be passed through to independent school districts or other independent single or special purpose districts should not be used to reduce the PILT payments.

The Comptroller General's ruling provides State governments with some degree of control over PILT payments. If they increase direct revenue-sharing payments to special purpose districts, units of local government may receive an increase in PILT funds through the form of lower deductions. However, because of the PILT acreage and population limitations, local governments could find that PILT payments do not make up for reduced Federal revenue-sharing funds passed through by the States.

Progress Report

During fiscal year 1979, payment adjustments were made to units of local government in 22 States in addition to regular annual payments to about 1,600 units of local government. The adjustments were necessitated by the Comptroller General's decision and corrected revenue-sharing data from eight States.

Recent audits by the General Accounting Office and the Department's Office of the Inspector General disclosed that much of the revenue-sharing data furnished by States are inaccurate. They found that these inaccuracies can be attributed to misunderstandings, lack of concern or inability of State officials to report this information.

As an interim measure, BLM is adopting the Inspector General's recommendation to amend the PILT regulations by requiring that all State-submitted data be audited by independent certified public accountants or qualified State auditors. Proposed regulations were issued in a Notice of rulemaking dated January 24, 1980.

Current Issues

The PILT Act is imprecise as to which units of local government are eligible for PILT payments. BLM has received many complaints from school districts and townships in States where counties are the eligible recipients. In Michigan, for example, the Michigan Township Association brought a suit against the Department seeking a judgement that Michigan townships, rather than counties, are entitled to PILT payments. If the Michigan townships are eventually successful, the PILT computation process would suffer a further complication. The Court in this case has accepted the criteria for determining which units of local government are eligible for payments and directed the Department to consider additional data in applying these criteria. Since this decision was handed down, townships in Pennsylvania, which have brought a similar suit, have asked if the Department would agree to a dismissal of their suit if the counties and townships can arrive at an agreement with regard to sharing in-lieu payments.

In fiscal year 1978, the Department supported proposed legislation to clarify the eligible units of local government and to remove the ineligibility of tax-exempt acquired lands. Although other amendments to the PILT Act made certain additional lands eligible for PILT, they failed to clarify the issue of eligible units of local government.

The Federal District Court's decision in the Michigan case appears to have resolved a major problem by accepting the Departments's criteria for determining payment eligibility.

Other complaints have been made about the exclusion of certain lands from the PILT process. The act is unclear about lands that are "dedicated to the use of water resource development projects of the United States."

Imperial County, California, formally protested the exclusion from PILT of certain undeveloped public lands withdrawn by the Water and Power Resource Service (WPRS). A hearing was held before the Interior Board of Land Appeals (IBLA), which ruled in favor of the county on April 16, 1979. This ruling will significantly affect PILT payments to the county and possibly others where WPRS undeveloped lands are located. It is uncertain whether the ruling will be a precedent for determining the eligibility of

other undeveloped lands. The Departments's Solicitor had requested a clarification of the ruling and advised BLM to withhold action until further guidance is given.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Administration

2. Field Administrator: None

B. Authorizing Legislation

Payments in Lieu of Taxes Act of 1976, P.L. 94-565, 31 U.S.C. 1601, as amended by P.L. 95-250 and P.L. 95-469

C. Funding	1978	1979	1980
1. Authorization ($000's)	N/A	105,000	108,000
2. Budget Authority	100,000	105,000	108,000

D. Appropriation Structure

Title: Payments in Lieu of Taxes

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	97,697	105,000	105,774*	108,000
2. Work Years	1	3	2	3

F. Performance

Work Units	N/A	N/A	N/A	N/A

G. Evaluations (completed)

1. Organization: General Accounting Office (GAO)
2. Title and Date: Alternatives for Achieving Greater Equities in Federal Land Payment Program, June 1979
3. Major Findings and Subsequent Action: See preceding Progress Report.

1. Organization: Office of Inspector General, Department of the Interior.
2. Title and Date: Review of Implementation of Public Law 94-565, as amended, Payments in Lieu of Taxes Act, June 1979.
3. Major Findings and Subsequent Action: See preceding Progress Report.

*Includes $1,288,088 paid from fiscal year 1978 funds.

MINERAL IMPACT LOANS

The upsurge in energy development on the public lands in the coming decade will generate a host of problems for local governments, principal among them ensuring the provision of public services--schools, hospitals, water and sewer systems, police, and fire protection--in the face of rapidly growing populations. FLPMA increased revenue sharing by amending the Mineral Leasing Act to raise the share of mineral receipts returned to the States from 37-1/2 percent to 50 percent. FLPMA also stated that these funds could be used for any purpose a State legislature directs, with priority to be given to the State subdivisions that are socially or economically impacted by mineral development.

FLPMA also authorized the Secretary of the Interior to make loans to States or their subdivisions impacted by Federal mineral development. To date, however, no funds have been appropriated under this provision.

Budget and Performance Analysis

A. Administrative Responsibility

1. Program Administrator: Assistant Director, Administration
2. Field Administrators: None

B. Authorizing Legislation

Federal Land Policy and Management Act P.L. 94-579; 43 U.S.C. 1701 et. seq. especially 1747

C. Funding	1978	1979	1980
1. Authorization ($000's)	N/A	40,000	50,000
2. Budget Authority ($000's)	-0-	-0-	-0-

D. Appropriation Structure

1. Title: Mineral Development Impact Loans

E. Program Costs	1978 Actual	1979 Planned	1979 Actual	1980 Planned
1. Dollars ($000's)	-0-	-0-	-0-	-0-
2. Work Years	-0-	-0-	-0-	-0-

F. Performance				
Work Units	-0-	-0-	-0-	-0-

G. Evaluations (Completed, Underway, or Planned)

None

H. **Evaluations** (Underway)

None

I. **Evaluations** (Planned)

None

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

In response to several recommendations by the Public Land Law Review Commission, the Congress provided specific language in FLPMA for the identification and protection of unique areas of national significance on the public lands. The Congress defined these "Areas of Critical Environmental Concern" (ACEC's) as areas:

> "within the public lands where special management attention is needed (when such areas are developed or where no development is required) to protect and prevent irreparable damage to important historical, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards."

The FLPMA also provided that the identification of ACEC's be given priority in the "inventory of all public lands and their resources and other values" but that such identification "shall not, of itself, change or prevent damage of the management or use of public lands (Section 201(a)). FLPMA further provided that designation of ACEC's be given priority in "the development and revision of land use plans" and that BLM give such areas special management attention (Section 202(c)(3)).

In the legislative history of FLPMA, Congress made clear that it viewed ACEC's as special places within the public lands. The Senate Committee on Interior and Insular Affairs (Senate Report No. 94-583) said that "management of national resources lands (public lands) is to include" giving special attention to the protection of ACEC's, for the purpose of ensuring "that the most environmentally important and fragile lands will be given. . .early attention and protection." The Committee Report also said, "Unlike wilderness areas. . .(ACEC's) are not necessarily areas in which no development can occur. Quite often, limited development, when wisely planned and properly managed, can take place in these areas without unduly risking life or safety or permanent damage to historic, cultural, or scenic values or natural systems or processes."

Thus the Act (FLPMA), and intent of the Act, set the basic foundation from which to prepare policy and procedures for identifying, designating and managing ACEC's.

Progress Report

On June 6, 1979, BLM published in the Federal Register its draft ACEC policy and procedural guidelines. These superseded more general guidelines issued as an Organic Act Directive[1/] in October 1977.

The draft guidelines established the Bureau's proposed policy for a process to identify, designate, and manage areas within the public lands where

1/ An Organic Act Directive is the name of an internal Bureau system designed to provide interim management direction to all affected employees charged with carrying out implementation responsibilities under FLPMA. The interim directives remain in force until superseded by regulations or Bureau manuals.

special management attention is required to protect and prevent irreparable damage to important historical, cultural, and scenic values, fish and wildlife resources and other natural systems and processes, and to protect human life and property from natural hazards.

ACEC identification and management is accomplished through BLM's on-the-ground resource management planning process. It is an integral part of each resource program's inventory and planning function. An approved Resource Management Plan constitutes the official designation of an ACEC; BLM is thus committed to managing the resource(s), value(s), or hazard(s) for which the area was designated in accordance with the ACEC's special management requirements. While protection of ACEC's is a primary responsibility, management policy will allow compatible multiple uses, including commodity production, to the extent they do not unduly risk life or safety or cause permanent damage to the resources or values being protected.

During the 90-day public review of the draft guidelines, BLM received 117 letters from the general public, organizations, and government agencies identifying approximately 106 separate issues. Those issues have been analyzed and, where appropriate, modifications have been incorporated into a final draft. The final ACEC guidelines will be published in late Spring 1980. In the interim, resources or values which have the potential of being designated as ACEC's are being managed under the existing authorities of FLPMA and other laws. In the Fiscal Year 1980 Annual Work Plan Directives, BLM field offices were instructed to test the draft ACEC guidelines by including ACEC considerations in all scheduled planning efforts. The resource management plan proposed for the California Desert Conservation Area was the first such Bureau plan to fully consider ACEC's. Some 50 ACEC's are proposed for designation in that plan.

Current Issues

Comments on the draft areas of critical environmental concern (ACEC's) guidelines suggest several key issues:

1. The ACEC process is perceived as just another preservation program. Many commentors feel that multiple resource uses and values other than those specified in the ACEC guidelines--those that make the areas in which they are located potential ACEC's--are inadequately considered. In particular, they are concerned about what types and to what degree other uses can occur in an ACEC.

As noted earlier in this chapter, FLPMA, its legislative history, and the ACEC guidelines themselves very specifically provide not only for protection of key fragile resources but also for a range of multiple-use activities, including specified kinds and degrees of development and commodity-production activities, provided that the important environmental resources within that area, or human property or lives, are not damaged or endangered. The ACEC process is not, and never was intended to be, a "lock-up" program.

2. Should ACEC designations encompass non-BLM lands. Some commentors are worried that the ACEC guidelines require BLM to designate and subsequently attempt to manage areas of critical environmental concerns outside of the

public lands managed by BLM. In fact, however, the Bureau has neither the authority nor the intent to manage outside its current jurisdiction. However, if resources or hazards within an ACEC--on BLM lands--are likely to be affected by uses on adjacent or nearby non-BLM land, the BLM District Manager should attempt to negotiate cooperative agreements, contracts, or other arrangements within BLM's authority in order to diminish any possible negative effects.

3. ACEC designation duplicates other existing laws and designations. Many commentors feel that the Bureau does not need to designate ACEC's because other designations already exist for protecting the kinds of values, resources, or hazards that are discussed in the ACEC guidelines.

The Bureau is required by law (FLPMA) to identify, designate, and protect ACEC's on lands it administers. An ACEC designation does not duplicate other Bureau designations. In the past the Bureau has designated special management areas for limited uses under its general authority to protect public health and safety, the natural environment, areas having cultural or scientific values, and to prevent excessive soil erosion and destruction of plant life and wildlife habitat. Some of these areas--those that contain important natural and cultural resources or those that protect health and safety--will no doubt qualify as ACEC's and, if so designated, will be managed under the specific authority of FLPMA. Some past designations have only been recognition-oriented. The ACEC process does more than provide recognition; it is a process for (1) determining what special management important environmental resources or hazards require, and (2) providing commitment that this management will continue to be provided on a priority basis in accordance with the requirements of FLPMA.

Moreover, ACEC designation, as well as other Bureau designation, must be the product of an approved Resource Management Plan--the basic decision document of BLM's resource management decision process. Part of the process in developing such plans is to consider possible alternative uses--including alternative special management designation--and select the use that is in the best public interest. Therefore, duplication of designations is virtually eliminated.

The Bureau is enthusiastic about implementing the policies for ACEC's as required by FLPMA. The process gives BLM the flexibility of managing important natural resources to protect their significant values for the American people while not unnecessarily restricting uses also important to our Nation, that are compatible with that protection.

CALIFORNIA DESERT PLAN

CALIFORNIA DESERT PLAN

Through FLPMA, Congress established the California Desert Conservation Area (CDCA) "to provide for the immediate and future protection and administration of the public lands in the California desert within the framework of a program of multiple use and sustained yield, and the maintenance of environmental quality."

The CDCA covers some 25 million acres, or about one-fourth of the land surface of California. About half of this area is public land administered by BLM. Congress noted that the California desert contains a variety of natural, cultural, and economic resources that are uniquely located adjacent to one of the Nation's largest population centers, and said "the use of desert resources can and should be managed to conserve these resources for future generations and to provide present and future use and enjoyment, particularly outdoor recreation uses, including the use, where appropriate, of off-road recreational vehicles."

The Act directed the Secretary to prepare and implement a comprehensive, long-range plan for the management, use, development, and protection of the public lands of the desert by September 30, 1980. An interim program to manage, use, and protect the public lands was authorized for the period between passage of the Act and the completion of the long-range plan.

A program of law enforcement, including a uniformed desert ranger force, also was authorized; and search-and-rescue was made an assigned mission of BLM where no other emergency forces are available.

FLPMA also provided for a California Desert Conservation Area Advisory Committee to advice BLM on development and implementation of the plan. The Committee was appointed in January 1977 and has served as the focal point for a major public involvement program since its initial meeting in March of that year.

Soon after approval of FLPMA, the Bureau of Land Management outlined a work program for preparation of the California Desert Plan within the four-year timeframe set by the Act. It involved shifting from unit-by-unit planning already underway to desert-wide inventory and planning. The program was reviewed by the California Desert Conservation Area Advisory Committee and adopted by BLM with modifications suggested by the Committee. The work program provided for two years of extensive resource inventories and data collection followed by six months of analysis, synthesis, and construction of draft alternative plans and environmental assessment.

The resource inventories were completed in March 1979, using random sampling and probability analysis techniques. The massive resource survey greatly increased BLM's knowledge of desert resources, but also indicated the need for considerably more detailed subsequent data collection, analysis, and study. The total inventory has provided a data base that is adequate for a general land use plan. The inventories covered vegetation and range, outdoor recreation, wilderness, wildlife, geology-energy-minerals, cultural resources, soil-water-air, and socio-economics and land use, including utility corridors and power plant sites.

Progress Report

The draft alternatives and draft Environmental Impact Statement (EIS) were issued early in 1980, initiating a 90-day public review. After the public review of the draft alternatives and EIS, BLM will review and analyze the public comments and draft a proposed plan. After a 30-day public review of the proposed plan, the Secretary will announce the final California Desert Management Plan so that it can be formally implemented in 1980 as intended by Congress.

The draft California Desert Plan really is four separate plans, or alternatives:

-- The no-action alternative would continue present management with little or no change. This alternative is required by law and serves as a baseline for measuring the effects and impacts of the other alternatives.

-- The protection alternative is oriented toward the maximum preservation of natural and cultural resources, with emphasis on protecting fragile resource values.

-- The use alternative focuses on meeting human demands by obtaining the highest degree of consumptive use and production that the desert resources are capable of providing, while still meeting all minimum environmental protection standards required by law.

-- The balanced alternative provides for a variety of uses within the sustained yield capabilities of the public land resources. This alternative represents a central position between the protection and use alternatives.

Public participation was an integral part in developing the Draft California Desert Plan alternatives. A focal point for this program has been the CDCA Advisory Committee. Beginning in 1977 and extending through 1979, the Committee held 15 public meetings attended by nearly 2,400 persons. A series of public forums covered recreation; energy; power plant siting and utility corridors; geology, minerals, and mining; concerns of desert residents; cultural resources; Native American concerns; soils and water; botanical resources, wildlife, and livestock grazing; wilderness; land exchanges; scientific research and education; military bases in the desert; and man's impact on desert resources.

BLM's Desert Plan Staff contacted numerous interest groups and requested position papers to obtain their views. Following study and analysis of the papers and input at public meetings, BLM held a series of "feedback" meetings with representatives of these groups to assure that their positions had been heard and understood correctly. Additional input was obtained through a series of opinion polls and from personal interviews with more than 600 desert residents. Contacts with officials of 23 cities and eight counties in the CDCA supplemented BLM's information on local government concerns.

There also has been considerable progress in the interim management program, which is carried out by the Riverside and Bakersfield Districts under the guidance of BLM's California State Office.

A central feature of the existing management program is the Desert Ranger Force. The CDCA's 17 law enforcement rangers are highly trained to assist Bureau resource management programs and meet visitor service needs. Compliance with regulations for off-road vehicle use, protection of artifacts, campground use, and natural area policies is achieved through an approach that emphasizes environmental awareness and education rather than enforcement techniques. The rangers have nearly 40,000 visitor contacts annually, and have provided emergency assistance in 1,500 cases to date. Rangers are involved in a wide array of incidents including search-and-rescue, trespass, hazard abatement, aircraft accidents and others. They also investigate thefts of native plants, Indian artifacts, and Government property and assist BLM resource specialists in land, minerals, wildlife, and grazing management. Temporary ranger stations are set up for visitor contact and service in heavy use areas such as the Imperial Sand Dunes and Jawbone Canyon in the CDCA.

An Environmental Impact Statement for proposed leasing and future development of geothermal resources in the Cosco Known Geothermal Resource Area (KGRA) is scheduled for completion during fiscal year 1980. The proposed project area covers 80,640 acres and is considered to have one of the highest potentials in California for geothermal steam. The U.S. Geological Survey and industry sources estimate potential electrical production from 600 to 4,500 megawatts, and leasing is planned by the end of the year.

Republic Geothermal, Inc., and Magma Corporation are constructing experimental geothermal generating plants on Federal leaseholds in the East Mesa KGRA; and the San Diego Gas and Electric Company is building a plant on private land near Heber.

Energy-related proposals from the private sector include a combined-cycle electric generating plant burning oil or natural gas to be located southeast of Daggett, major transmission lines from the Palo Verde nuclear plant in Arizona, major transmission lines from proposed coal-fired plants in Utah and Nevada (Intermountain Power Project and Allen-Warner Valley), transmission lines from Arizona to the San Diego area, and proposals for coal-fired electric generating plants in the eastern portion of the California Desert. An additional proposal involves a pipeline to carry coal slurry from south-central Utah to the California coast for shipment to Japan.

Completion of a land exchange between BLM and the San Diego Gas and Electric Company during fiscal year 1979 provided 5,600 acres to the company for a future power site east of Blythe, while BLM obtained 1,580 acres in the Desert Tortoise Natural Area and 480 acres on Case Mountain in Tulare County, including a grove of giant sequoia trees. BLM's acquisition of the Case Mountain property, valued at $735,000, obtained for the public one of the oldest remaining stands of the giant redwoods in non-public ownership. The desert lands were valued at $363,000 and provide a valuable addition to the preserve for the desert tortoise, California's State reptile.

BLM captured 145 feral burros on public lands in the Bakersfield District during fiscal year 1979, bringing the total removed from the CDCA to more than 600. Removal of an additional 600 burros, and placement in the custody of private individuals through BLM's wild horse and burro adoption program, was planned for the Riverside District during fiscal year 1980, depending on the availability of funds.

Management of off-road vehicles (ORV's) continued to be a major part of the interim management program. Final regulations for ORV management were issued by the Department of the Interior and will be implemented in the desert as part of the total Desert Plan implementation. About 100 ORV events were held during the past year; and permits for the same number have been requested for fiscal year 1980, involving some 60,000 to 70,000 participants. Of even greater importance is the incidental, non-organized of "play" use which is considerably more difficult to manage and causes considerable damage to lands and resources. The Riverside District is considering proposals for environmentally acceptable cross-country "point-to-point" motorcycle races.

The Young Adult Conservation Corps (YACC) carried out several major protection projects. YACC corps members built fencing and other protective works at cultural sites to protect ancient rock writings and petroglyphs numbering in the hundreds. YACC crews also erected fences, gates, and road barriers to stabilize the habitat of desert bighorn sheep, and assisted BLM and the recreational public by maintaining campgrounds and other visitor facilities.

Current Issues

Multiple-use management encompassing both protection and use of the California desert's public lands and resources has gained considerable acceptance among the general public, at least partly because of BLM's public awareness efforts. However, many basic conflicts between protectionists and consumptive users, both recreational and commodity oriented, remain unresolved on specific sites.

Continuing efforts at conflict resolution were underway in conjunction with the public review of the draft California Desert Plan alternatives.

The Bureau has enlisted the aid of the American Arbitration Association to perform an independent assessment of the remaining issues and concerns and to assist in key interest group meetings to help resolve major conflicts and to help conduct eight meetings and workshops throughout the desert.

Issue identification was one of the first tasks completed by the Desert Advisory Committee and the BLM Desert Plan Staff. The major issue categories include: protection of archaeological and historical artifacts; Native American values; recreation; wilderness designation; motorized vehicle access; energy production and plant siting; utility corridors; mineral exploration and development; domestic livestock grazing; and land tenure adjustment.

The Bureau plans to have the Plan completed and implemented based on Secretarial concurrence in calendar year 1980.

APPENDIX - Organizational Structure

APPENDIX

BLM Organizational Structure

The Bureau of Land Management was established on July 16, 1946, through the consolidation of the General Land Office (created in 1812) and the Grazing Service (formed in 1934) as set forth in the President's Reorganization Plan 3 of 1946. Since 1946, BLM has evolved into a tri-level, decentralized, line and staff organization.

The headquarters office in Washington has responsibility for advising the Secretary of the Interior on national BLM policy, program, and budget needs. It issues Bureauwide criteria and procedures for implementing policy and evaluates the conduct of operations, particularly those of the State Offices. It has roughly 500 employees or roughly eight percent of BLM permanent full-time positions.

The recent reorganization of the Washington Office retained the Associate Director with authority to act across the board for the Director. Three new Deputy Directors exercise the Director's authority within the areas of Lands and Resources Management; Services; and Policy, Programs, and Budget.

The reorganization changed the functions and increased the number of Assistant Directors from five to six. Assistant Directors are charged principally with high-level direction of current policy practices and programs. Division and Office Chiefs, who have specific technical expertise, operate under the Assistant Directors or the Deputy Director, Policy, Programs, and Budget.

The Director has six Office Chiefs who report directly to him on specialized or sensitive functions. They manage the offices of the Executive Secretary, Equal Employment Opportunity, Public Affairs, Special Projects, Coal Management, and Congressional Affairs.

Twelve State Offices constitute the intermediate management level. A State Director is the responsible line officer. The State Office transforms policy guidance originating in Washington headquarters into operating instructions for District Offices. With assistance from his staff, the State Director directs, coordinates, monitors, and evaluates the conduct of field operations and advises the Washington Office on the State's program activities and budgetary needs. Nineteen hundred, or 30 percent of BLM's permanent employees, are assigned to the State Offices. The acreage they manage ranges from Montana's 7 million acres to Alaska's 246 million. An Eastern States Office in Alexandria, Virginia, manages approximately 65,000 acres in States bordering on or east of the Mississippi River and is responsible for mineral leasing on 40 million acres, much of it under privately owned surface lands.

At the local level, some 56 District Offices carry out public lands programs. The chief line officer is the District Manager. Thirty-three hundred employees, or 52 percent of the permanent staff, are assigned to the Districts.

In Alaska, the Fairbanks District covers 172 million acres, roughly the same amount of land which 54 districts cover in the lower 48 States. The Anchorage District covers 52 million acres. In the lower 48 the largest district is Las Vegas, Nevada, with over 12 million acres and the smallest is Dickinson in North Dakota with 62 thousand acres. The average size of a district in the lower 48 is 3 million acres, averaging 53,000 acres per district employee.

A district is divided into Resource Areas. The chief officer of an Area Office is the Area Manager, who has responsibility for implementing multiple-use plans and monitoring on-the-ground use of the public lands. Resource Areas range in size from roughly 50 million acres in Alaska to about 7,000 surface acres in the Oklahoma City Resource Area. The staff size varies similarly, but averages around six or seven. There are 163 Area Offices in BLM, many of them sharing office locations with District Offices, 45 being detached Resource Area headquarters in more remote locations.

Two Field Offices provide special support: the Denver Service Center and the Boise Interagency Fire Center. The Denver Service Center provides consolidated administrative support to State and District Offices and, to some extent, to the Washington Office. It also is charged with gathering, storing, and retrieving natural resource inventory data and adapting scientific and technological concepts to field use. It has 467 positions, 7.5 percent of the permanent BLM staff. The line official of the Service Center is a Director who reports to the Bureau Director in Washington.

The mission of the Boise Interagency Fire Center (BIFC) is to pool interagency fire fighting resources and deploy them when fires get beyond the control of local BLM, Forest Service, Bureau of Indian Affairs, and National Park Service officials. The responsible BLM official is the BLM Director, BIFC. BLM has 30 employees at the BIFC.

Four Outer Continental Shelf (OCS) Offices are responsible for field-level staff work for OCS oil and gas leasing. This consists of two major efforts: developing environmental statements and conducting lease sales. The offices are in Anchorage, Los Angeles, New Orleans, and New York. Their Managers report to the Assistant Director of Energy and Mineral Resources in Washington. These four offices account for 155 positions or 2.5 percent of BLM permanent full-time positions.

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